



**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT (GVS&DD)  
BOARD OF DIRECTORS**

**BOARD MEETING**

**Friday, September 29, 2023**

**8:30 am**

**28<sup>th</sup> Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia**

**Webstream available at <https://metrovancover.org>**

[Membership and Votes](#)

**A G E N D A<sup>1</sup>**

**A. ADOPTION OF THE AGENDA**

**1. September 29, 2023 Meeting Agenda**

That the GVS&DD Board adopt the agenda for its meeting scheduled for September 29, 2023 as circulated.

**B. ADOPTION OF THE MINUTES**

**1. July 28, 2023 Meeting Minutes**

That the GVS&DD Board adopt the minutes for its meeting held July 28, 2023 as circulated.

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**C. DELEGATIONS**

**D. INVITED PRESENTATIONS**

**E. CONSENT AGENDA**

*Note: Directors may adopt in one motion all recommendations appearing on the Consent Agenda or, prior to the vote, request an item be removed from the Consent Agenda for debate or discussion, voting in opposition to a recommendation, or declaring a conflict of interest with an item.*

**1. LIQUID WASTE COMMITTEE REPORTS**

**1.1 Interim Reclaimed Water Policy**

That the GVS&DD Board approve the proposed Interim Reclaimed Water Policy, as presented in the report dated July 27, 2023 titled "Interim Reclaimed Water Policy".

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<sup>1</sup> Note: Recommendation is shown under each item, where applicable. All Directors vote unless otherwise noted.

**1.2 Appointment of Enforcement Officers**

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That GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw 299, 2007* and the *Environmental Management Act*:
  - i. rescind the appointment of Metro Vancouver employee Ana Nic Lochlainn as an officer;
  - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, Amanda Craft, and Mike Mijares as officers; and
  - iii. rescind the appointment of former City of Vancouver employee Nicole Montgomery as a deputy sewage control manager.
- b) pursuant to section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*:
  - i. rescind the appointment of Metro Vancouver employee Ana Nic Lochlainn; and
  - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft.

**2. FINANCE COMMITTEE REPORTS**

**2.1 Tree Management on Metro Vancouver Lands – Revised Board Policy**

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That the GVS&DD Board approve the revised Tree Management on Metro Vancouver Lands Policy as presented in the report dated August 11, 2023, titled “Tree Management on Metro Vancouver Lands Policy – Revised Board Policy.”

**3. ZERO WASTE COMMITTEE REPORTS**

**3.1 Appointment of Enforcement Officers**

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That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996* and the *Environmental Management Act*:
  - i. rescind the appointment of Ana Nic Lochlainn as an officer; and
  - ii. appoint Metro Vancouver employees, Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft as officers.
- b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*:
  - i. rescind the appointment of Ana Nic Lochlainn; and
  - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft.

**F. ITEMS REMOVED FROM THE CONSENT AGENDA**

**G. REPORTS NOT INCLUDED IN CONSENT AGENDA**

## **1. LIQUID WASTE COMMITTEE REPORTS**

### **1.1 Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023**

That the GVS&DD Board:

- a) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023*; and
- b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023*.

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## **H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN**

## **I. OTHER BUSINESS**

### **1. GVS&DD Board Committee Information Items and Delegation Summaries**

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## **J. BUSINESS ARISING FROM DELEGATIONS**

## **K. RESOLUTION TO CLOSE MEETING**

*Note: The Board must state by resolution the basis under section 90 of the Community Charter on which the meeting is being closed. If a member wishes to add an item, the basis must be included below.*

That the GVS&DD Board close its meeting scheduled for September 29, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

- 90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
- (g) litigation or potential litigation affecting the municipality.

## **L. RISE AND REPORT (Items Released from Closed Meeting)**

## **M. ADJOURNMENT/CONCLUSION**

That the GVS&DD Board adjourn/conclude its meeting of September 29, 2023.

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
BOARD OF DIRECTORS**

Minutes of the Regular Meeting of the Greater Vancouver Sewerage and Drainage District (GVS&DD) Board of Directors held at 11:49 am on Friday, July 28, 2023, in the 28<sup>th</sup> Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

**MEMBERS PRESENT:**

Delta, Chair, Director George V. Harvie  
Anmore, Vice Chair, Director John McEwen  
Burnaby, Director Sav Dhaliwal  
Burnaby, Director Mike Hurley  
Coquitlam, Director Craig Hodge  
Coquitlam, Director Teri Towner  
Delta, Director Dylan Kruger  
Electoral Area A, Director Jen McCutcheon  
Langley City, Director Paul Albrecht\*  
Langley Township, Director Eric Woodward  
Langley Township, Director Steve Ferguson\*  
Maple Ridge, Director Dan Ruimy  
New Westminster, Director Patrick Johnstone  
North Vancouver City, Director Linda Buchanan\*  
Port Coquitlam, Director Brad West\*  
Port Moody, Director Meghan Lahti\*  
Richmond, Director Malcolm Brodie

Richmond, Director Bill McNulty  
Richmond, Director Chak Au  
Surrey, Director Mike Bose  
Surrey, Director Gordon Hepner  
Surrey, Director Pardeep Kooner  
Surrey, Director Brenda Locke  
Surrey, Director Rob Stutt  
Vancouver, Director Rebecca Bligh\*  
Vancouver, Director Adriane Carr  
Vancouver, Director Lisa Dominato  
Vancouver, Director Sarah Kirby-Yung  
Vancouver, Director Mike Klassen  
Vancouver, Director Lenny Zhou  
White Rock, Director Megan Knight  
Commissioner Jerry W. Dobrovolsky  
(Non-voting member)

**MEMBERS ABSENT:**

Burnaby, Director Pietro Calendino  
North Vancouver District, Alternate Director  
Mike Little  
Pitt Meadows, Director Nicole MacDonald

Surrey, Director Harry Bains  
Vancouver, Director Ken Sim  
West Vancouver, Director Mark Sager

**STAFF PRESENT:**

Dorothy Shermer, Corporate Officer  
Morgan Mackenzie, Legislative Services Coordinator, Board and Information Services

\* denotes electronic meeting participation as authorized by Section 3.6.2 of the *Procedure Bylaw*

**A. ADOPTION OF THE AGENDA**

**1. July 28, 2023 Meeting Agenda**

**It was MOVED and SECONDED**

That the GVS&DD Board adopt the revised agenda for its meeting scheduled for July 28, 2023 as circulated.

**CARRIED**

**B. ADOPTION OF THE MINUTES**

**1. June 30, 2023 Meeting Minutes**

**It was MOVED and SECONDED**

That the GVS&DD Board adopt the minutes for its meeting held June 30, 2023 as circulated.

**CARRIED**

**C. DELEGATIONS**

No items presented.

**D. INVITED PRESENTATIONS**

No items presented.

**E. CONSENT AGENDA**

At the request of the Directors, the following item was removed from the Consent Agenda, for consideration under Section F. Items Removed from the Consent Agenda:

- 1.2 Phase 2 Design Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant – Change Order to AECOM Contract PC14-0408
- 1.3 Award of RFP No. 23-121 Technical Services for the North Shore Wastewater Treatment Plant Project

**It was MOVED and SECONDED**

That the GVS&DD Board adopt the recommendations presented in the following item as presented in the July 28, 2023 MVRD Board Consent Agenda:

- 1.1 Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions and Impact Mitigation Framework

**CARRIED**

The item and recommendation referred to above is as follows:

**1.1 Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions and Impact Mitigation Framework**

Report dated June 21, 2023, from Jennifer Crosby, Director, Project Management Office, Project Delivery, and Nermine Tawfik, Supervisor Community Engagement, External Relations, providing the GVWD and GVS&DD Boards with an update on progress with developing an equitable impact mitigation framework for member jurisdictions in which Metro Vancouver is undertaking capital project construction, including publishing the *Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions*.

*Recommendation:*

That the GVS&DD Board receive for information the report dated June 21, 2023 titled “Guide to Metro Vancouver Utility Capital Projects for Member Jurisdictions and Impact Mitigation Framework”.

*Adopted on Consent*

**F. ITEMS REMOVED FROM THE CONSENT AGENDA**

Items removed from the Consent Agenda for consideration under Section F were considered in numerical order.

**1.2 Phase 2 Design Build Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant – Change Order to AECOM Contract PC14-0408**

Report dated July 11, 2023, from Cheryl Nelms, General Manager, Project Delivery, Nick Kassam, General Manager, Procurement & Real Estate Services, and Dean Rear, Chief Financial Officer & General Manager, Financial Services, requesting authorization by the GVS&DD Board for a change order to AECOM, for Phase 2 Design Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant, through a change order in the amount of \$113,000,000, for a total contract value of \$153,000,000 (exclusive of taxes).

**It was MOVED and SECONDED**

That GVS&DD Board:

- a) approve Phase 2 Design Consulting Services for the Lions Gate Secondary Wastewater Treatment Plant of AECOM Contract PC-0408 through a change order in the amount of \$113,000,000, for a total contract value of \$153,000,000 (exclusive of taxes), subject to final review by the Commissioner; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the change order should proceed.

**CARRIED**

Director Buchanan voted in the negative.

**1.3 Award of RFP No. 23-121 Technical Services for the North Shore Wastewater Treatment Plant Project**

Report dated July 11, 2023, from Cheryl Nelms, General Manager, Project Delivery, Nick Kassam, General Manager, Procurement & Real Estate Services, and Dean Rear, Chief Financial Officer & General Manager, Financial Services, providing the GVS&DD Board with the results of Request for Proposal (RFP) No. 23-121: Technical Services for the North Shore Wastewater Treatment Plant Project and recommending the GVS&DD Board award the contract to Stantec Consulting Ltd. in an amount up to \$25,000,000 (exclusive of taxes).

**It was MOVED and SECONDED**

That GVS&DD Board:

- a) approve award of RFP No. 23-121 for Technical Services for the North Shore Wastewater Treatment Plant Project, in the amount of \$25,000,000 (exclusive of taxes) to Stantec Consulting Ltd., subject to final review by the Commissioner; and
- b) authorize the Commissioner and the Corporate Officer to execute the required documentation once the Commissioner is satisfied that the award should proceed.

**CARRIED**

Director Buchanan voted in the negative.

**G. REPORTS NOT INCLUDED IN CONSENT AGENDA**

**1.1 Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023**

Report dated July 11, 2023, from Dana Zheng, Program Manager, Policy, Planning Analysis, Liquid Waste Services, seeking GVS&DD Board approval of the Sewer Use Amendment Bylaw.

**It was MOVED and SECONDED**

That the GVS&DD Board give first, second, and third reading to *Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023*.

**CARRIED**

**It was MOVED and SECONDED**

That the GVS&DD Board pass and finally adopt *Greater Vancouver Sewerage and Drainage District Sewer Use Amendment Bylaw No. 366, 2023*.

**CARRIED**

**1.2 Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023**

Report dated July 11, 2023, from Dana Zheng, Program Manager, Policy, Planning and Analysis, Liquid Waste Services, seeking GVS&DD Board approval of the Hospital Pollution Prevention Amendment Bylaw.

**It was MOVED and SECONDED**

That the GVS&DD Board give first, second, and third reading to *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023*.

**CARRIED**

**It was MOVED and SECONDED**

That the GVS&DD Board pass and finally adopt *Greater Vancouver Sewerage and Drainage District Hospital Pollution Prevention Amendment Bylaw No. 367, 2023*.

**CARRIED**

**2.1 Public Engagement on Development Cost Charges**

Report dated July 25, 2023, from Jerry W. Dobrovolny, Commissioner/Chief Administrative Officer, seeking authorization from each of the GVS&DD, GVWD and MVRD Boards for undertaking a consultation process in September with member jurisdictions, the Urban Development Institute and other parties on proposed updates to Development Cost Charges.

**It was MOVED and SECONDED**

That the GVS&DD Board direct staff to consult with member jurisdictions, the Urban Development Institute and other parties on proposed updates to Development Cost Charges as recommended in the report dated July 25, 2023 titled "Public Engagement on Development Cost Charges".

**CARRIED**

**H. MOTIONS FOR WHICH NOTICE HAS BEEN GIVEN**

No items presented.

**I. OTHER BUSINESS**

**1. GVS&DD Board Committee Information Items and Delegation Summaries**

**J. BUSINESS ARISING FROM DELEGATIONS**

No items presented.



**K. RESOLUTION TO CLOSE MEETING**

**It was MOVED and SECONDED**

That the GVS&DD Board close its meeting scheduled for July 28, 2023 pursuant to section 226 (1) (a) of the *Local Government Act* and the *Community Charter* provisions as follows:

“90 (1) A part of a council meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:

- (e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality;
- (g) litigation or potential litigation affecting the municipality; and
- (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.”

**CARRIED**

**L. RISE AND REPORT (Items Released from Closed Meeting)**

No items presented.

**M. ADJOURNMENT/CONCLUSION**

**It was MOVED and SECONDED**

That the GVS&DD Board adjourn its meeting of July 28, 2023.

**CARRIED**

(Time: 11:57 am)

CERTIFIED CORRECT

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Dorothy Shermer, Corporate Officer

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George V. Harvie, Chair

61443937 FINAL

To: Liquid Waste Committee

From: Winson Cheng, Senior Project Engineer, Business Development, Liquid Waste Services

Date: July 27, 2023 Meeting Date: September 13, 2023

Subject: **Interim Reclaimed Water Policy**

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### **RECOMMENDATION**

That the GVS&DD Board approve the proposed Interim Reclaimed Water Policy, as presented in the report dated July 27, 2023 titled "Interim Reclaimed Water Policy".

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### **EXECUTIVE SUMMARY**

Metro Vancouver has the opportunity to encourage regional use of water that is reclaimed after wastewater treatment. Doing so will reduce the use of valuable, scarce drinking water, and will support commitments to use waste as a resource. Reclaimed water filling facilities have been included in the designs of the new wastewater treatment plants. These facilities will make reclaimed water available to users outside of the plants. An Interim Reclaimed Water Policy is proposed to enable the use of reclaimed water from Metro Vancouver's wastewater treatment plants. The policy is labeled as interim as it's expected there will be amendments based on knowledge gained through initial pilot work.

### **PURPOSE**

To present a proposed Interim Reclaimed Water Policy for consideration by the GVS&DD Board.

### **BACKGROUND**

Metro Vancouver recognizes water is a precious resource and aims to conserve high quality drinking water by using Reclaimed Water when it is financially, socially, and/or ecologically beneficial. Currently in the Metro Vancouver region, water that has been treated to drinking water standards is used for many purposes that do not require this high level of treatment. Due to the effects of climate change, Metro Vancouver is planning for more frequent and intense drought in the summers and envisions using Reclaimed Water as a sustainable supplement to the region's water system, when cost effective. Diversifying our sources of water will help address the risk of drought.

Reclaimed water facilities will be incorporated into the designs for new wastewater treatment plants. A separate proposal for a pilot reclaimed water facility is being developed in coordination with a municipal partner, through which implementation steps for the proposed policy can be developed.

### **INTERIM RECLAIMED WATER POLICY**

The purpose of the proposed Interim Reclaimed Water Policy is to guide the use of reclaimed water from Metro Vancouver's wastewater treatment plants. The policy will help build practices, encourage use, and manage risk, as well as contribute to water reuse and the Board's conservation commitments.

Initially the application of this policy will focus on using reclaimed water to fill truck-mounted portable tanks for specific uses. In the future, Metro Vancouver will consider making reclaimed water at the highest level of non-potable treatment available for a range of uses. Uses may include, landscaping, sports field irrigation; firefighting; dust control; sewer flushing; washing down roads, vehicles and equipment; construction uses; and industrial uses. Potential users of reclaimed water include municipalities, institutions, and private businesses.

The policy will encourage use, manage risk, and establish guidelines for water pricing and implementation plans at planned and future potential facilities.

#### **ALTERNATIVES**

1. That the GVS&DD Board approve the proposed Interim Reclaimed Water Policy, as presented in the report dated July 27, 2023, titled “Interim Reclaimed Water Policy”.
2. That the GVS&DD Board receive for information the report dated July 27, 2023, titled “Interim Reclaimed Water Policy” and provide alternate direction to staff.

#### **FINANCIAL IMPLICATIONS**

If the Policy is approved by the GVS&DD Board, staff will work with the Water Services department to develop pricing appropriate for the grade of water being provided from the wastewater treatment plants. Business cases for capital investments in reclaimed water facilities at wastewater treatment plants will continue to be brought to the Board separately.

#### **OTHER IMPLICATIONS**

Provincial regulations including the *Reclaimed Water Guideline* and *Municipal Wastewater Regulation* are applicable to facilities and reclaimed water uses that the policy will enable. Consultation with Provincial staff is expected to be necessary to clarify steps to ensure that reclaimed water providers and users meet the Guideline and Regulation.

#### **CONCLUSION**

Metro Vancouver has the opportunity to encourage regional use of water that is reclaimed after wastewater treatment, using reclaimed water facilities that are already planned at new wastewater treatment plants. Doing so will reduce the use of valuable, scarce drinking water, and will support commitments to use waste as a resource. Staff recommend Alternative 1.

#### **ATTACHMENT**

1. Interim Reclaimed Water Policy

61111607

**INTERIM RECLAIMED WATER POLICY**

Effective Date: September 29, 2023

Approved By: GVS&amp;DD Board

**Policy No. XX-XXX****PURPOSE**

The *Interim Reclaimed Water Policy* will guide the use of Reclaimed Water from Metro Vancouver's wastewater treatment plants. This Interim Policy will help build practices, encourage use, and manage risk with respect to the reuse of water from wastewater treatment plants.

This Interim Policy applies to Reclaimed Water use projects both initiated by Metro Vancouver or brought forward by interested parties. This Interim Policy will be informed by the development of the Drinking Water Management Plan, and will be updated when the Plan is adopted.

**DEFINITIONS**

**"Board"** means the Board of Directors of the Metro Vancouver Regional District ("MVRD"), the Greater Vancouver Water District ("GVWD"), the Greater Vancouver Sewerage and Drainage District ("GVS&DD"), and the Metro Vancouver Housing Corporation ("MVHC"), as the context requires;

**"Highest Level of Non-Potable Treatment"** means municipal wastewater that is treated in accordance with the quality and monitoring requirements set out in the Municipal Wastewater Regulation for the "greater exposure potential" category of Reclaimed Water;

**"Metro Vancouver"** means, collectively, MVRD, GVWD, GVS&DD, and MVHC, or any one of them, as the context requires;

**"Municipal Wastewater"** has the meaning set out in the Municipal Wastewater Regulation;

**"Municipal Wastewater Regulation"** means the *Municipal Wastewater Regulation*, B.C. Reg. 46/2018, as amended or replaced from time to time;

**"Reclaimed Water"** means municipal wastewater that is treated by a wastewater facility to meet specified standards and is suitable for reuse in accordance with the Municipal Wastewater Regulation; and

**"Reclaimed Water Guideline"** means the "Reclaimed Water Guideline – A Companion Document to the Municipal Wastewater Regulation made under the *Environmental Management Act*" issued July 2013 by the BC Ministry of Environment, as amended or replaced from time to time.

### POLICY

Metro Vancouver recognizes water is a precious resource and aims to conserve high quality drinking water by encouraging the use of Reclaimed Water when it is a suitable substitution meeting applicable health and environmental regulations, and is financially, socially, and/or ecologically beneficial.

Currently in the Metro Vancouver region, water that has been treated to meet the regulatory requirements for drinking water is used for many purposes that do not require this high level of treatment.

There is an opportunity for reclaimed water to play a role in the conservation of drinking water in the region.

### Objectives

Metro Vancouver will:

1. Encourage the development and use of Reclaimed Water at the Highest Level of Non-Potable Treatment, which will allow for a range of potential uses;
2. Evaluate potential projects on a case-by-case basis using a methodology that includes health, social, financial, environmental and legal benefits, opportunities and risks;
3. Set pricing for the use of Metro Vancouver's Reclaimed Water to account for the social, financial and environmental benefits and opportunities of using Reclaimed Water; and
4. Implement this Interim Policy by developing a Reclaimed Water Implementation Strategy that describes how Metro Vancouver will support the use of Reclaimed Water use in the region where appropriate.

### Potential Uses for Reclaimed Water

Metro Vancouver will consider making Reclaimed Water at the Highest Level of Non-Potable Treatment available for a range of uses in addition to current uses at the wastewater treatment plants. Uses may include, but are not limited to, the following, pending evaluation:

- Sewer flushing;
- Firefighting;
- Wildfire risk mitigation;
- Dust control;
- Washing down roads, vehicles and equipment;
- Construction uses;
- Industrial uses; and
- Lawn, landscaping and sports field irrigation.

### Supporting Documents

The Province offers guidance and regulation for Reclaimed Water use through the:

- Reclaimed Water Guideline; and
- Municipal Wastewater Regulation

This Policy is also aligned with the following Metro Vancouver policies and strategies, including the:

- Board Strategic Plan;
- Integrated Liquid Waste and Resource Management Plan;
- Drinking Water Management Plan (under review); and
- Ecological Health Framework.

To: Liquid Waste Committee

From: Maari Hirvi Mayne, Program Manager Liquid Waste Regulation, Environmental Regulation and Enforcement, Parks & Environment

Date: August 16, 2023 Meeting Date: September 13, 2023

Subject: **Appointment of Enforcement Officers**

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**RECOMMENDATION**

That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw 299, 2007* and the *Environmental Management Act*:
    - i. rescind the appointment of Metro Vancouver employee Ana Nic Lochlainn as an officer;
    - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, Amanda Craft, and Mike Mijares as officers; and
    - iii. rescind the appointment of former City of Vancouver employee Nicole Montgomery as a deputy sewage control manager.
  - b) pursuant to section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*:
    - i. rescind the appointment of Metro Vancouver employee Ana Nic Lochlainn; and
    - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft.
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**EXECUTIVE SUMMARY**

Recent changes in staff at Metro Vancouver and the City of Vancouver have resulted in a need to update staff appointments as Greater Vancouver Sewerage and Drainage District (GVS&DD) Board-designated officers and deputy sewage control manager under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw 299, 2007* (the Bylaw), the *Environmental Management Act* and the *Offence Act*. Metro Vancouver staffing changes are a result of recent retirements and promotions within Metro Vancouver. Staff recommend that the GVS&DD Board appoint staff and rescind appointments accordingly.

**PURPOSE**

To appoint and rescind appointments of Metro Vancouver employees as Board-designated officers and to rescind the appointment of a former City of Vancouver employee as a Board-designated deputy sewage control manager.

**BACKGROUND**

Metro Vancouver's Liquid Waste Regulatory Program supports the goals of the *Integrated Liquid Waste and Resource Management Plan* through regulation of the discharge of wastes to the region's sanitary sewer systems.

Employment status changes for Metro Vancouver and City of Vancouver environmental regulatory staff have resulted in a need to update staff appointments to ensure appropriate authority to advance liquid waste management goals. Three Metro Vancouver retirements and two promotions within Metro Vancouver resulted in five vacancies being filled recently. Section 29 of the *Environmental Management Act* and the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007* grant authority to Board-designated deputy sewage control managers and officers.

Metro Vancouver staff are responsible for the administration of the GVS&DD liquid waste management bylaws within the boundaries of the GVS&DD. Within the City of Vancouver, City staff have historically administered these bylaws. This arrangement has been in effect since the Bylaw was first enacted in 1990. A formal agreement between Metro Vancouver and the City of Vancouver was established to ensure that delivery of source control services by the City serves the interests of the GVS&DD and its taxpayers.

### **ROLE OF MUNICIPAL SEWAGE CONTROL OFFICERS**

Officers may enter property, inspect works, and obtain records and other information to promote compliance with the Greater Vancouver Sewerage and Drainage District liquid waste management bylaws.

The *Offence Act* allows regional districts to appoint enforcement officers for the purpose of serving summons for bylaw violations. Officers, if appointed for that purpose, may serve a summons in respect of alleged offences under the GVS&DD liquid waste management bylaws.

### **ALTERNATIVES**

1. That the GVS&DD Board:
  - a) pursuant to the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw 299, 2007* and the *Environmental Management Act*:
    - i. rescind the appointment of Metro Vancouver employee Ana Nic Lochlainn as an officer;
    - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, Amanda Craft, and Mike Mijares as officers; and
    - iii. rescind the appointment of former City of Vancouver employee Nicole Montgomery as a deputy sewage control manager.
  - b) pursuant to section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*:
    - i. rescind the appointment of Metro Vancouver employee Ana Nic Lochlainn; and
    - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft.
2. That the GVS&DD Board receive for information the report dated August 16, 2023 titled "Appointment of Enforcement Officers" and provide alternative direction to staff.

### **FINANCIAL IMPLICATIONS**

There are no financial implications as the GVS&DD appointees are already on staff, and there are no costs associated with rescindments.



**CONCLUSION**

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated officers and deputy sewage control manager under the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw*, the *Environmental Management Act*, and the *Offence Act*. Staff recommend that the GVS&DD Board adopt Alternative 1.

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To: Finance Committee

From: David Leavers, Division Manager, Regional Parks, Visitor & Operations Services  
Mike Mayers, Division Manager, Water Services, Watershed Operations & Protection

Date: August 11, 2023 Meeting Date: September 14, 2023

Subject: **Tree Management on Metro Vancouver Lands – Revised Board Policy**

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**RECOMMENDATION**

That the MVRD/GVS&DD/GVWD/MVHC Boards approve the revised Tree Management on Metro Vancouver Lands Policy as presented in the report dated August 11, 2023, titled “Tree Management on Metro Vancouver Lands Policy – Revised Board Policy.”

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**EXECUTIVE SUMMARY**

In February, 2018, a *Tree Management on Metro Vancouver Lands* board policy was approved by the Boards of MVRD, GVS&DD, GVWD, and MVHC (Metro Vancouver). The policy directs that Metro Vancouver maintain a consistent approach regarding the inspection and management of trees to ensure that its processes are aligned and standardized for risk assessment across all operating departments.

This report recommends a number of revisions to the *Tree Management on Metro Vancouver Lands* policy to continuously improve Metro Vancouver’s tree management practices. Proposed changes include new/revised definitions, an updated policy statement, and the removal of procedure based language (now that a new set of corporate procedures has been developed to support the policy). New to the policy is the inclusion of a section that imbeds direction regarding tree replacement requirements while managing for hazard trees, or when accommodating new development on Metro Vancouver lands in urban settings. The policy will require that Metro Vancouver replace any trees removed at a minimum replacement ration of 2:1 or the standard set by the local municipality, whichever is higher.

**PURPOSE**

To seek approval of the revised *Tree Management on Metro Vancouver Lands* policy (Attachment 1) regarding the inspection and management of trees to manage associated risks, and to establish tree replacement requirements for trees removed.

**BACKGROUND**

Under the *Occupier’s Liability Act*, occupiers of land and premises have a duty to take reasonable care that people and their property will be reasonable safe in using the premises. That duty of care includes the management of trees.

Metro Vancouver has extensive landholdings in urban settings with frequent interface between inhabitants, assets, and Metro Vancouver trees; in forested areas such as regional parks and

conservation areas where the public is invited to recreate; and, in wilderness areas in which there are rare interfaces between the public or staff and assets and Metro Vancouver trees.

On February 23, 2018, a *Tree Management on Metro Vancouver Lands* board policy was approved by MVRD, GVS&DD, GVWD, and MVHC (Metro Vancouver). The policy was approved to provide staff with guidance regarding the inspection and management of trees wholly or in part on Metro Vancouver Lands to ensure that processes are aligned and standardized for risk assessment across all Metro Vancouver departments.

### **POLICY RELATED WORK (2018-2023)**

Over the past five years, staff from across the organization have worked with consultants, focused on the development of a set of corporate procedures to support the *Tree Management on Metro Vancouver Lands* policy. Procedures have been created to ensure that processes are aligned and standardized for risk assessment across all Metro Vancouver operation departments, as required by the Board policy. The procedures include direction for all operating departments including Water Services, Regional Parks, Liquid Waste Services, Metro Housing and Solid Waste Services. The procedures cover topics including:

1. Tree Risk Zoning
2. Site Types
3. On-demand Inspections
4. Scheduled Inspections
5. Tree Removal and Hazard Mitigation
6. Staff Roles and Responsibilities
7. Tree Risk Assessment Process

In addition, staff recently launched a standardized approach to managing hazard tree data throughout all Metro Vancouver operations. A database, accessed by staff through a cloud-based application and online desktop portal, was developed in-house to collect and retain all hazard tree information in order to maintain an inventory of trees and their respective inspection schedules, as required by the policy. All operating departments are required to transfer all existing records into the new database.

Over the past five years, a desire has been identified to imbed clear direction regarding tree replacement requirements while managing for hazard trees, or when accommodating new development on Metro Vancouver lands in urban settings.

### **PROPOSED REVISIONS TO THE POLICY**

Proposed revisions to the *Tree Management on Metro Vancouver Lands* policy reference much of the work that has been completed in the last five years to continuously improve Metro Vancouver's tree management practices. These revisions are illustrated in the red-line version of the policy, included in the report as Attachment 2.

The following is a summary of proposed revisions to the policy:

**Definitions**

- Updated definition of “Hazard Tree” to introduce a time element;
- Introduced definition of “Metro Vancouver”;
- Updated definition of “Metro Vancouver Lands” to include lands without tenure where there is a legal assignment of the lands to Metro Vancouver; and
- Eliminated definition of “Tree Risk Rating” as it has been included in the new corporate procedures.

**Policy Statement**

A new policy statement is proposed that references the types of interfaces Metro Vancouver has with inhabitants, assets, and trees on Metro Vancouver Lands. The new statement introduces language regarding the priorities of public and employee safety, environmental protection, property and critical infrastructure and prudent financial management in managing a hazard tree program. The statement notes that trees will be inspected and maintained in accordance with the policy, as well as by any procedures that are in effect from time to time. The statement “in accordance with the annual budget” is added in recognition that Metro Vancouver’s ability to manage risk is limited by the financial resources available through operating budgets.

**Inspection and Management of Metro Vancouver Trees**

Section 1 of the policy has been revised to remove procedural language that has been moved to the new corporate procedures. The proposed policy states more emphatically that “Metro Vancouver will inspect and maintain Trees on Metro Vancouver Lands in accordance with its corporate procedures.”

**Hazard Tree Abatement Actions**

Section 2 of the policy has been revised to state that abatement actions will be undertaken “in accordance with corporate procedures” rather than “in accordance with the recommendations of a Qualified Tree Assessor” to be consistent with the removal of procedural language for this revised policy.

**Tree Replacement**

Section 3 of the policy imbeds direction for staff and consultants regarding tree replacement requirements while managing for hazard trees, or when accommodating new development on Metro Vancouver lands in urban settings. Through this revision, Metro Vancouver commits to maintaining or providing a replacement ratio of a minimum 2:1 or the standard set by local municipality, whichever is higher.

## **ALTERNATIVES**

1. That the MVRD/GVS&DD/GVWD/MVHD Boards approve the revised Tree Management on Metro Vancouver Lands Policy as presented in the report dated August 11, 2023, titled “Tree Management on Metro Vancouver Lands Policy – Revised Board Policy.”
2. That the MVRD/GVS&DD/GVWD/MVHD Board receive for information the report dated August 11, 2023, titled “Tree Management on Metro Vancouver Lands Policy – Revised Board Policy.”

## **FINANCIAL IMPLICATIONS**

Subject to the approval of alternative 1, staff will proceed to manage its hazard tree management program with new corporate procedures in place and within current approved 2023 budgets and bring forward any required cost increases to future budgets.

Regional Parks has proposed an additional \$150,000 increase in 2024 operating budget to become fully compliant, and currently has over \$400K to continue to manage the hazard tree management program. The relative costs for Liquid Waste Services, Regional Housing, and Solid Waste Services will be less than for Regional Parks and increases for these divisions will be proposed in future years.

Additional funding will be required in most operating departments to become fully compliant with the *Tree Management on Metro Vancouver Lands* policy over the next 15 years (the minimum inspection cycle / schedule of assessment) as different operating departments are at different stages with respect to policy implementation. Individual departments will be required to complete a tree risk zoning mapping exercise for all properties under their authority, and illustrate all urban settings. Each zoning map will identify the site type of each property (urban settings / wilderness settings). Scheduled inspections will be required for all urban settings identified with potential targets in accordance with a minimum 15-year inspection cycle. Cost estimates related to tree removal and hazard mitigation will be determined year-to-year and will be built into future budget requests. Re-occurring assessment and reduced mitigation work requirements will reduce the need for cost increases for the ongoing program over future years.

## **CONCLUSION**

The proposed revisions to the Tree Management on Metro Vancouver Lands Policy provide increased clarity and direction on the management of trees, specifically addressing tree risk assessment practices, specific references to new operating procedures and the implementation of the new hazard tree management system. New tree replacement requirements are imbedded in the revised policy. The proposed amended policy will further align and standardize processes for tree risk assessment across all Metro Vancouver departments. Alternative 1 is recommended.

## **Attachments**

1. Revised *Tree Management on Metro Vancouver Lands* policy
2. Current *Tree Management on Metro Vancouver Lands* policy – Red-Line Version

**TREE MANAGEMENT ON METRO VANCOUVER LANDS**

Effective Date: February 23, 2018 (revised September 29, 2023)

Approved By: MVRD/MVHC/GVWD/GVS&DD Boards

**Policy No. GV-017**

**PURPOSE**

To provide direction on the inspection and management of trees wholly or in part on Metro Vancouver lands.

**DEFINITIONS**

**“Hazard Tree”** means a Tree, identified in writing by a Qualified Tree Risk Assessor, to be in such a condition that there is a substantial likelihood that all or part of the Tree will fail within the schedule of assessment, resulting in the risk of personal injury or property damage;

**“Metro Vancouver”** means, collectively, the Metro Vancouver Regional District, the Greater Vancouver Sewerage and Drainage District, the Greater Vancouver Water District and the Metro Vancouver Housing Corporation;

**“Metro Vancouver Lands”** means fee-simple and leasehold properties held by one or more of the entities comprising Metro Vancouver, but does not include lands covered by statutory rights of way, licence agreements, permits or other land tenure or access agreements, unless responsibility for Tree management is specifically assigned to Metro Vancouver in the relevant instrument;

**“Qualified Tree Risk Assessor”** refers to a Metro Vancouver staff person or external party who is qualified and certified under a WorkSafeBC approved program to conduct a Tree risk assessment and make recommendations for abatement of risks where a Tree is assessed as a Hazard Tree; and

**“Tree”** means a woody perennial plant usually having a single trunk or stem which has a diameter of at least 10 centimetres when measured from a height of 1.4 metres above the natural grade of the land and with an overall height of at least 4.5 metres.

**POLICY**

Metro Vancouver has extensive landholdings in urban settings with frequent interface between inhabitants, assets, and Trees; in forested areas such as regional parks and conservation areas where the public is invited to recreate; and, in wilderness settings with rare interfaces between the public or Metro Vancouver staff, assets and Trees. In managing the risks associated with its Trees, Metro Vancouver prioritizes public and employee safety, environmental protection, property and critical infrastructure and prudent financial management of the organization. Trees will be inspected and maintained in accordance with this Policy, and any procedures in effect from time to time, in a manner that reflects the priority and urgency necessary to manage the risks, in accordance with the annual budget.

## BOARD POLICY

This Policy guides the inspection and management of Trees on Metro Vancouver Lands by ensuring that processes are aligned and standardized for risk assessment across all Metro Vancouver departments.

### 1. Inspection and Management of Metro Vancouver Trees:

- a) Where Metro Vancouver Lands contain Trees for which a failure could result in one or more of:
  - i. personal injury while using sites that are authorized for use by Metro Vancouver staff, contractors, and the public;
  - ii. damage to Metro Vancouver or adjacent property owner assets; or
  - iii. interruption in the provision of Metro Vancouver services to the public,Metro Vancouver will inspect and maintain Trees on Metro Vancouver Lands in accordance with its corporate procedures.
- b) Where Metro Vancouver Lands contain Trees which have not yet been part of a scheduled assessment, Metro Vancouver will assess and manage Trees upon receipt of a notice, whether from Metro Vancouver staff or the public, setting out a concern regarding perceived dangers posed by the Tree and the location of the Tree.

### 2. Hazard Tree Abatement Actions:

- Where a Tree has been assessed as a Hazard Tree, abatement actions will be undertaken in accordance with corporate procedures in order to achieve the following broad objectives:
- i. to reduce/address risk to Metro Vancouver staff and the public;
  - ii. to protect Metro Vancouver infrastructure and other assets; and
  - iii. to enhance and maintain healthy forested ecosystems in urban settings and wilderness settings.

### 3. Tree Replacement:

Metro Vancouver will maintain a Tree replacement program to ensure successional replacement by defining the number of appropriate replacement Trees required for every Tree removed in urban settings. While managing for Hazard Trees or when accommodating new development in urban settings, Metro Vancouver will maintain or provide a replacement ratio of a minimum of 2:1 or the standard set by local municipality, whichever is higher.

**TREE MANAGEMENT ON METRO VANCOUVER LANDS**

Effective Date: February 23, 2018 (revised September 29, 2023)

Approved By: MVRD/GVS&DD/GVWD/MVHC Boards

**PURPOSE**

To provide direction on the inspection and management of trees wholly or in part on Metro Vancouver lands.

**DEFINITIONS**

“**Hazard Tree**” means a Tree, identified in writing by a Qualified Tree Risk Assessor, to be in such a condition that there is a substantial likelihood that all or part of the Tree will fail within the schedule of assessment, resulting in the risk of personal injury or property damage;

“**Metro Vancouver**” means, collectively, the Metro Vancouver Regional District, the Greater Vancouver Sewerage and Drainage District, the Greater Vancouver Water District and the Metro Vancouver Housing Corporation;

“**Metro Vancouver Lands**” means fee-simple and leasehold properties held by one or more of the entities comprising Metro Vancouver, but does not include lands covered by statutory rights of way, licence agreements, permits or other land tenure or access agreements, unless responsibility for Tree management is specifically assigned to Metro Vancouver in the relevant instrument;

“**Qualified Tree Risk Assessor**” refers to a Metro Vancouver staff person or external party who is qualified and certified under a WorkSafeBC approved program to conduct a Tree risk assessment and make recommendations for abatement of risks where a Tree is assessed as a Hazard Tree; and

“**Tree**” means a woody perennial plant usually having a single trunk or stem which has a diameter of at least 10 centimetres when measured from a height of 1.4 metres above the natural grade of the land and with an overall height of at least 4.5 metres.

**POLICY**

Metro Vancouver has extensive landholdings in urban settings with frequent interface between inhabitants, assets, and Trees; in forested areas such as regional parks and conservation areas where the public is invited to recreate; and, in wilderness settings with rare interfaces between the public or Metro Vancouver staff, assets and Trees. In managing the risks associated with its Trees, Metro Vancouver prioritizes public and employee safety, environmental protection, property and critical infrastructure and prudent financial management of the organization. Trees will be inspected and maintained in accordance with this Policy, and any procedures in effect from time to time, in a manner that reflects the priority and urgency necessary to manage the risks, in accordance with the annual budget.



This Policy guides the inspection and management of Trees on Metro Vancouver Lands by ensuring that processes are aligned and standardized for risk assessment across all Metro Vancouver departments.

### **1. Inspection and Management of Metro Vancouver Trees:**

(a) Where Metro Vancouver Lands contain Trees for which a failure could result in one or more of:

- i. personal injury while using sites that are authorized for use by Metro Vancouver staff, contractors, and the public;
- ii. damage to Metro Vancouver or adjacent property owner assets; or
- iii. interruption in the provision of Metro Vancouver services to the public,

Metro Vancouver will inspect and maintain Trees on Metro Vancouver Lands in accordance with its corporate procedures.

(b) Where Metro Vancouver Lands contain Trees which have not yet been part of a scheduled assessment, Metro Vancouver will access and manage Trees upon receipt of a notice, whether from Metro Vancouver staff or the public, setting out a concern regarding perceived dangers posed by the Tree and the location of the Tree.

### **2. Hazard Tree Abatement Actions:**

Where a Tree has been assessed as a Hazard Tree, abatement actions will be undertaken in accordance with corporate procedures in order to achieve the following broad objectives:

- i. to reduce/address risk to Metro Vancouver staff and the public;
- ii. to protect Metro Vancouver infrastructure and other assets; and
- iii. to enhance and maintain healthy forested ecosystems in urban settings and wilderness settings.

### **3. Tree Replacement:**

Metro Vancouver will maintain a Tree replacement program to ensure successional replacement by defining the number of appropriate replacement Trees required for every Tree removed in urban settings. While managing for Hazard Trees or when accommodating new development in urban settings, Metro Vancouver will maintain or provide a replacement ratio of a minimum of 2:1 or the standard set by local municipality, whichever is higher.

To: Zero Waste Committee

From: Nicole MacDonald, Program Manager Solid Waste Regulation, Environmental Regulation and Enforcement, Parks and Environment

Date: August 31, 2023 Meeting Date: September 14, 2023

Subject: **Appointment of Enforcement Officers**

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**RECOMMENDATION**

That the GVS&DD Board:

- a) pursuant to the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996* and the *Environmental Management Act*:
    - i. rescind the appointment of Ana Nic Lochlainn as an officer; and
    - ii. appoint Metro Vancouver employees, Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft as officers.
  - b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*:
    - i. rescind the appointment of Ana Nic Lochlainn; and
    - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft.
- 

**EXECUTIVE SUMMARY**

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated officers under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*, the *Environmental Management Act*, and the *Offence Act*. Staffing changes are a result of retirements and promotions within Metro Vancouver. Staff recommend that the GVS&DD Board appoint staff and rescind appointments accordingly.

**PURPOSE**

To appoint four Metro Vancouver employees as Board-designated officers, and to rescind the appointment of one former officer.

**BACKGROUND**

Metro Vancouver's Solid Waste Regulatory Program supports the goals of the *Integrated Solid Waste and Resource Management Plan* by regulating the management of municipal solid waste and recyclable material at privately operated facilities.

Employment status changes for Metro Vancouver environmental regulatory staff have resulted in a need to update staff appointments to ensure appropriate authority to advance solid waste management goals. Three Officers recently retired and one Officer was promoted within Metro Vancouver, resulting in four vacancies recently being filled. The *Greater Vancouver Sewerage and*

*Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996* grants authority to Board-designated officers.

### ROLE OF ENFORCEMENT OFFICERS

Officers may enter property, inspect works, and obtain records and other information to promote compliance with the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*.

The *Offence Act* allows regional districts to appoint enforcement officers for the purpose of serving summons for bylaw violations. Officers, if appointed for that purpose, may serve a summons in respect of alleged offences under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*.

To ensure staffing support and flexibility, Officers are typically appointed for all three of Metro Vancouver's environmental regulatory programs (air quality, liquid waste, and solid waste) regardless of which program they were initially recruited for.

### ALTERNATIVES

1. That the GVS&DD Board:
  - a) pursuant to the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996* and the *Environmental Management Act*:
    - i. rescind the appointment of Ana Nic Lochlainn as an officer; and
    - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft, as officers.
  - b) pursuant to Section 28 of the *Offence Act* for the purpose of serving summons for alleged violations under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*:
    - i. rescind the appointment of Ana Nic Lochlainn; and
    - ii. appoint Metro Vancouver employees Jason Assam, Karnjit Bains, Cynthia Barros, and Amanda Craft.
2. That the GVS&DD Board receive for information the report dated August 31, 2023, titled "Appointment of Enforcement Officers" and provide alternative direction to staff.

### FINANCIAL IMPLICATIONS

There are no financial implications anticipated as the GVS&DD appointees are already employed by Metro Vancouver and there are no costs associated with rescindments.

### CONCLUSION

Recent changes in staff have resulted in a need to update staff appointments as GVS&DD Board-designated officers under the *Greater Vancouver Sewerage and Drainage District Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*, the *Environmental Management Act*, and the *Offence Act*. Staff recommend that the GVS&DD Board approve Alternative 1.

To: Liquid Waste Committee

From: Jacqueline Liu-Pope, Senior Project Engineer, Policy Planning and Analysis, Liquid Waste Services

Date: August 18, 2023 Meeting Date: September 13, 2023

Subject: **Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023**

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### RECOMMENDATION

That the GVS&DD Board:

- a) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023*; and
  - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023*.
- 

### EXECUTIVE SUMMARY

This report proposes to repeal and replace *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 268, 2012* with *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023*. The proposed bylaw incorporates feedback from food sector establishments and provides more clarity and flexibility to encourage compliance, while updating bylaw requirements to minimize grease contributions to the system. Fee increases related to bylaw contraventions are included to better reflect current costs of re-inspections and sampling (fees have only been charged 25 times in the last ten years).

### PURPOSE

To seek GVS&DD Board adoption of *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023* (proposed bylaw) (Attachment 1).

### BACKGROUND

The discharge of fats, oils, and grease (FOG) into sewers can cause major issues for the wastewater system. FOG build-up on pipes and equipment leads to increased operation and maintenance costs and reduced flow capacity in the sewer system, resulting in \$2.7 million in annual costs to address FOG build up. Food sector establishments are a major source of FOG and their wastewater discharge is regulated by the *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 268, 2012* (Bylaw No. 268) (Reference 1). Bylaw No. 268 sets requirements for grease interceptor sizing, maintenance, and fixture attachments.

At its April 27, 2018 meeting, the GVS&DD Board adopted a recommendation to review Bylaw No. 268 to update language and provide more clarity, and to better reflect current food sector operations.

## **ABOUT THE ENGAGEMENT PROGRAM**

The bylaw review was initiated in spring 2018. Three phases of engagement followed, targeting stakeholders directly affected by possible changes to Bylaw No. 268 (see Attachment 2 for list of stakeholders). In the first phase of engagement, staff held small group meetings to discuss current bylaw requirements and technical details. In the second phase of engagement, several proposed bylaw changes were developed, discussed, and generally agreed upon with stakeholders. Staff intended to conclude the final phase of engagement in 2020, however, due to the special circumstances of the COVID-19 pandemic, the bylaw review was put on hold to allow the food sector industry to concentrate on day-to-day business during a difficult time.

With COVID-19 restrictions lifted and the food sector industry beginning to rebound, albeit in the face of other challenges such as inflation and labour shortages, staff resumed the final phase of engagement in February 2023. A summary of the first two phases of engagement was posted on the Metro Vancouver website, and an online survey on proposed bylaw changes was initiated. More than 17,000 stakeholders were notified of the proposed bylaw changes and were provided the opportunity for further engagement.

## **WHAT WE HEARD**

Informed by stakeholder feedback, the proposed bylaw changes aim to provide more flexibility to help reduce costly plumbing retrofits while updating bylaw requirements to minimize grease contributions to the sewer system. Overall, participants were supportive of the majority of proposed bylaw changes. Some key themes that were identified during engagement included: concerns about the financial impact of grease interceptor installation and upgrade costs on the food sector industry, especially after the impacts of the COVID-19 pandemic; requests for exemptions; and, comments about jurisdictional inconsistency when it comes to requirements, standards, and implementation. An engagement summary report and feedback summary table are included as Attachments 2 and 3.

## **MEMBER FEEDBACK**

Input from member jurisdictions was gathered and incorporated through a municipal update and feedback session held in late 2019. Feedback was gathered from the Regional Engineers Advisory Committee (REAC) and REAC Liquid Waste Subcommittee at various progress presentations between 2018 and 2023. Proposed bylaw amendments were presented to REAC at their June 9, 2023 meeting. Overall, there is support from member jurisdictions for the proposed bylaw changes, with an interest in current and future enforcement methods to encourage compliance.

## **PROPOSED BYLAW CHANGES**

The four main proposed changes, informed by stakeholder feedback are:

- Update and clarify the definition of food sector establishments to ensure that emerging sectors are regulated alongside traditional restaurants.
- Update which fixtures must, and must not, be connected to grease interceptors to better reflect plumbing configurations commonly found in commercial kitchens and the potential amount of FOG discharged through each fixture.
- Give business owners more flexibility in selecting the right grease interceptor for their needs.

- Update re-inspection fees (from \$300 to \$500) and sampling fees (from \$150 to \$300) for the first time since 2012, to reflect the current costs.

Although there are only four main proposed changes, there are a number of formatting-related changes. A new bylaw, instead of an amending bylaw, is being proposed for clarity.

#### **ALTERNATIVES**

1. That the GVS&DD Board:
  - a) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023*; and
  - b) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023*.
2. That the GVS&DD Board receive for information the report dated August 18, 2023, titled "Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023" and provide alternate direction to staff.

#### **FINANCIAL IMPLICATIONS**

Fees associated with contraventions of Bylaw No. 268 have not been updated since its adoption in 2012. The proposed increases in re-inspection and sampling fees better reflect the current costs to conduct these activities by enforcement staff. In the past ten years, only around 1.5 per cent of inspections necessitated re-inspection/sampling fees (around 25 instances). The additional revenue from the proposed fee increases is expected to be minimal.

#### **CONCLUSION**

Bylaw No. 268 regulates wastewater discharges from food sector establishments and sets requirements for grease interceptor sizing, maintenance, and fixture attachments. The proposed bylaw was developed through engagement with stakeholders and will provide more clarity and flexibility to improve the regulation of wastewater discharges from food sector establishments. Fee updates will better reflect current costs of sampling and re-inspection by enforcement staff, when required in the event of a bylaw contravention (fees were only charged 25 times in the last ten years).

#### **ATTACHMENTS**

1. Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023
2. Food Sector Grease Interceptor Bylaw Review Final Engagement Summary Report, September 2023
3. Food Sector Grease Interceptor Consideration of Feedback Summary Table, September 2023
4. Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023 Presentation

#### **REFERENCE**

1. [Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 268, 2012](#)

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
BYLAW NO. 365, 2023

A bylaw to regulate the discharge of wastewater from food sector establishments

WHEREAS:

- A. The *Environmental Management Act* of British Columbia and the *Greater Vancouver Sewerage and Drainage District Act* authorize the Greater Vancouver Sewerage and Drainage District (the "District") to make bylaws respecting the direct or indirect discharge of wastes into any sewer or drain connected to a sewerage facility operated by the District;
- B. The *Greater Vancouver Sewerage and Drainage District Act* authorizes the District to set fees payable by persons who discharge liquid waste into any work, service or plant of the District for conveying, disposing of, or treating liquid waste, or work, service, or plant connected thereto; and;
- C. It is deemed desirable to regulate the discharge of wastewater from food sector establishments that contains or may be contaminated with fats, oils and grease.

NOW THEREFORE the Board of the Greater Vancouver Sewerage and Drainage District enacts as follows:

1. **Citation**

The official citation of this bylaw is the "Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 365, 2023" ("this bylaw").

2. **Repeal of Bylaw**

The "Greater Vancouver Sewerage and Drainage District Food Sector Grease Interceptor Bylaw No. 268, 2012" is hereby repealed.

3. **Definitions**

In this bylaw:

"**approved**" means an approval of or given by a Sewage Control Manager;

"**Approved Grease Interceptor Selection Methodology**" refers to the methodology approved by a Sewage Control Manager for choosing a grease interceptor with the appropriate rated flow capacity as required in this bylaw;

"**drain**" means a pipe, conduit, channel, or other similar equipment used to convey wastewater;

"**fats, oils and grease**" means insoluble organic fats, oils or grease from animal or vegetable sources;

**“flow capacity”** means the quantity of wastewater measured in relation to units of time that is discharged into or through a grease interceptor;

**“flow control fitting”** means a device that controls flow capacity;

**“food sector establishment”** means any premises, except premises used solely as a private residence or premises that manufacture food products primarily for wholesale purposes, where food in liquid or solid form is prepared, packaged, served, sold, or otherwise handled in a manner that results in the discharge, directly or indirectly into a sewer or sewage facility, of fats, oils and grease and includes restaurants, delicatessens, fast-food premises, commissary kitchens, markets, cafeterias, hospitals, bars, grocery stores, bakeries, butcher shops, and other similar premises;

**“garbage compactor”** means a device that compacts waste that may be contaminated with fats, oils and grease;

**“gravity grease interceptor”** means a device that uses gravity and interior baffling to separate and retain fats, oils and grease from wastewater;

**“grease interceptor”** means a gravity grease interceptor, hydromechanical grease interceptor, or grease removal device that separates, and then removes or retains, fats, oils and grease from wastewater before it is discharged into a sewer or sewage facility;

**“grease removal device”** means a hydromechanical grease interceptor that separates and removes fats, oils and grease from wastewater using an automatic, mechanical process;

**“hydromechanical grease interceptor”** means a device that uses hydromechanical separation, interior baffling, and air entrainment barriers, whether in combination or independently, to separate and retain fats, oils and grease from wastewater;

**“point of discharge”** means the point at which wastewater is discharged from a grease interceptor into a sewer or sewage facility;

**“rated flow capacity”** means the flow capacity to which the grease interceptor is certified under a standard listed in section 8.7 or rated in accordance with an alternative methodology or standard approved under section 8.8;

**“sampling point”** means the point at which a sample of wastewater can be collected;

**“Sewer Use Bylaw”** means *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007*;

**“solids interceptor”** means a device that separates, and then removes or retains, solids from wastewater, including a basket, screen, or other similar device;

**“Trucked Liquid Waste Bylaw”** means *Greater Vancouver Sewerage and Drainage District Trucked Liquid Waste Bylaw No. 345, 2021*; and



**“wastewater depth”** means the depth of the wastewater measured from the bottom of the grease interceptor to the surface of the content in the grease interceptor.

**4. Terms**

Terms defined in the Sewer Use Bylaw or incorporated by reference into the Sewer Use Bylaw have the same meaning in this bylaw unless otherwise defined.

**5. References**

References in this bylaw to an enactment, including the Sewer Use Bylaw, include the enactment as it may be amended or replaced from time to time.

**6. Application**

Every person who discharges, or allows or causes to be discharged, directly or indirectly, wastewater from a food sector establishment into a sewer or sewage facility must comply with this bylaw.

**7. Restrictions**

7.1 Subject to sections 7.2 and 7.3, no person shall discharge, or allow or cause to be discharged, directly or indirectly, wastewater from a food sector establishment into a sewer or sewage facility if the wastewater contains any of the following:

- a. high volume discharge;
- b. restricted waste;
- c. stormwater;
- d. prohibited waste;
- e. uncontaminated water;
- f. groundwater;
- g. trucked liquid waste;
- h. any substance, whether gaseous, liquid, or solid, that may cause damage to a sewer or sewage facility by corrosion;
- i. any substance, whether gaseous, liquid, or solid, in a concentration or quantity that may cause interference with the proper operation of a sewer or sewage facility;
- j. any substance, whether gaseous, liquid, or solid, in a concentration or quantity that may injure or is capable of injuring the health of any person, property or life form;

- k. any substance, whether gaseous, liquid, or solid, in a concentration or quantity that is or may become a safety hazard to persons who operate or maintain a sewer or sewage facility; or
  - l. any substance, whether gaseous, liquid, or solid, used to dilute non-domestic waste, including water.
- 7.2 A person may discharge, or allow or cause to be discharged, directly or indirectly into a sewage facility, non-domestic trucked liquid waste from a food sector establishment if the discharge is in compliance with the Trucked Liquid Waste Bylaw.
- 7.3 A person may discharge, or allow or cause to be discharged, directly or indirectly into a sewer or sewage facility, restricted waste that is pH waste, biological oxygen demand, total suspended solids or total oil and grease, all as described in Schedule B of the Sewer Use Bylaw, if the discharge is otherwise in compliance with this bylaw.
- 7.4 No person shall add, or cause or permit to be added into a grease interceptor any enzymes, solvents, hot water, bacteria, or other biological or chemical substance to facilitate the passage of fats, oils and grease through a grease interceptor.

## **8. Grease Interceptor Requirements**

- 8.1 Every owner or operator of a food sector establishment must use grease interceptors in accordance with this bylaw to separate fats, oils and grease, and then remove or retain such fats, oils and grease from wastewater before the wastewater is discharged into a sewer or sewage facility.
- 8.2 The following fats, oils and grease bearing fixtures in a food sector establishment must be connected directly or indirectly to a grease interceptor:
- a. cooking equipment that is connected, directly or indirectly, to a drain, including wok stations, soup kettles, tilt kettles, and other similar cooking equipment;
  - b. sinks that are used for pre-rinsing or washing pots, pans, dishes, cutlery or kitchen utensils, or to perform other similar washing activities;
  - c. self-cleaning exhaust hoods installed over cooking equipment;
  - d. garbage compactors, if their usage results in a discharge, directly or indirectly into a sewer or sewage facility, of fats, oils and grease;
  - e. hub/funnel drains used to service fats, oils and grease bearing fixtures;

- f. dishwashing equipment installed in a food sector establishment that is located in:
    - i. a building that was constructed on or after the date of adoption of this bylaw; or
    - ii. a space that was converted on or after the date of adoption of this bylaw, in order to support the function of a food sector establishment; and
  - g. any other plumbing equipment or device that discharges or conveys wastewater which contains or may be contaminated with fats, oils and grease.
- 8.3 The following in a food sector establishment must not be connected to a grease interceptor:
- a. toilets and urinals; and
  - b. subject to section 8.4, food grinders, potato peelers and other similar equipment used for the preparation of food.
- 8.4 Food grinders, potato peelers and other similar equipment used in the preparation of food must be connected to a solids interceptor that is connected to a grease interceptor if the wastewater discharged from such food preparation equipment contains or may be contaminated with fats, oils and grease.
- 8.5 A garbage compactor used in connection with a food sector establishment but situated outside of the building or structure of that food sector establishment must:
- a. be connected to a drain that is connected to a grease interceptor; and
  - b. prevent the mixing of storm water with the wastewater that is discharged into the drain connected to the grease interceptor.
- 8.6 Grease interceptors must not be located in a place or manner that obstructs or interferes with an officer's exercise of powers to ensure compliance with this bylaw, the Sewer Use Bylaw, or the *Environmental Management Act*.
- 8.7 All grease interceptors installed must be certified to:
- a. Canadian Standards Association (CSA) B481 Series 12 "Hydro Mechanical Grease Interceptors," as amended from time to time;
  - b. American Society of Mechanical Engineers (ASME) A112.14.3 "Hydro Mechanical Grease Interceptors," as amended from time to time;
  - c. ASME A112.4.4 "Grease Removal Devices," as amended from time to time; or

- d. International Association Plumbing and Mechanical Officials (IAPMO)/ American National Standards Institute (ANSI) Z1001 “Prefabricated Gravity Grease Interceptors,” as amended from time to time, and have a minimum hydraulic retention time of one minute.
- 8.8 Despite section 8.7, if a grease interceptor does not meet requirements in section 8.7, then the grease interceptor installed must be rated for flow capacity according to an alternative methodology or standard approved by a Sewage Control Manager.
- 8.9 The sum of all assigned flow rates of all plumbing fixtures connected to a grease interceptor, as determined in accordance with the Approved Grease Interceptor Selection Methodology, must not exceed the grease interceptor’s rated flow capacity.
- 8.10 If the manufacturer of a grease interceptor prescribes the use of a flow control fitting with the grease interceptor, the grease interceptor must have the prescribed flow control fitting.
- 8.11 The size of a flow control fitting that is required to be used with a grease interceptor must not exceed the rated flow capacity of the grease interceptor.
- 8.12 An officer or a Sewage Control Manager may require anything related to the discharge of wastewater from a food sector establishment, including any machine, structure, material or equipment on the premises that is being inspected, to be operated, used, set in motion, or opened under conditions specified by the officer or Sewage Control Manager.

## **9. Labelling Requirements**

- 9.1 The rated flow capacity of a grease interceptor must be:
  - a. permanently labelled on the grease interceptor or at a location deemed appropriate by an officer or a Sewage Control Manager and be visible and clearly legible at all times; or
  - b. shown to an officer or a Sewage Control Manager upon request, in written documentation issued by the manufacturer of the grease interceptor.

## **10. Grease Interceptor Maintenance**

- 10.1 Every grease interceptor must be examined and cleaned in accordance with this section 10.
- 10.2 A grease interceptor must be examined, and cleaned:
  - a. at least once every 90 consecutive days; or
  - b. when the total thickness of fats, oils and grease and solids in the grease interceptor is equal to 25% or more of the wastewater depth,

whichever occurs earlier, or at any time or frequency that a Sewage Control Manager, by order, deems either sufficient or necessary to meet the purposes of section 1 of the Sewer Use Bylaw.

**10.3 Examination and cleaning of a grease interceptor must include:**

- a. full evacuation of the grease interceptor;
- b. clearing of all inlet, outlet, and air relief ports of any obstructions or other matter that may interfere with the proper functioning of the grease interceptor;
- c. examination of all baffles, seals, and internal components for damage and other defects or conditions that may interfere with the proper functioning of the grease interceptor; and
- d. replacement or repair of any damaged components and other defects or conditions that may interfere with the proper functioning of the grease interceptor.

**10.4 Fats, oils and grease evacuated from a grease interceptor during the examination and cleaning required under this section 10 must not, directly or indirectly, be discharged:**

- a. in any form or manner, into the environment or into any sewer or storm sewer; or
- b. liquid form, into a municipal solid waste collection system.

**11. Record Keeping**

**11.1 For each examination and cleaning required to be performed under section 10, every owner or operator of a food sector establishment must:**

- a. keep and maintain on the premises a written record of the date of the examination, cleaning, and maintenance, with detailed descriptions of the types and quantities of matter evacuated;
- b. keep each record for at least two years after the year in which the record was first made; and
- c. make such records available for inspection by an officer or a Sewage Control Manager upon request.

**12. Fees**

**12.1 If a Sewage Control Manager deems that any of the following inspection actions are required to ensure compliance with this bylaw, the owner or operator of a food sector establishment must pay the following fees set out in Table 1:**

**Table 1**

<b>Inspection action</b>	<b>Amount</b>
a. Re-inspection	\$500
b. Sampling and analyses	\$300

12.2 With respect to the fees payable under section 12.1:

- a. any fees not paid within 30 days of the invoice date will be subject to a monthly interest charge of 1.25% per month (15% per annum); and
- b. if any fees for re-inspection or for sampling and analyses are not paid within 90 days of the due date, the food sector establishment will be in non-compliance with this bylaw and the discharge to a sewer will be unauthorized.

### **13. Offences**

13.1 A person who contravenes any provision of this bylaw, other than the provisions listed in section 13.2, commits an offence and is liable to a fine not exceeding \$10,000.

13.2 A person who contravenes any of the following commits an offence and is liable to a minimum fine of \$2,000 and a maximum fine not exceeding \$10,000:

- a. section 8.1 [*installation of a grease interceptor*];
- b. section 8.2 [*connection to a grease interceptor*];
- c. section 8.9 [*flow from all plumbing fixtures connected to the grease interceptor*];
- d. section 10.1 [*examination and cleaning*].

13.3 If an offence under section 13.1 continues for more than one day, separate fines, each not exceeding the maximum fine for that offence, may be imposed for each day the offence continues.

13.4 If an offence under section 13.2 continues for more than one day, separate fines, each not less than the minimum fine for that offence and not exceeding the maximum fine for that offence, may be imposed for each day the offence continues.

13.5 Nothing in this bylaw limits a Sewage Control Manager or the District from utilizing any other remedy that would otherwise be available at law.

#### 14. General Conditions

- 14.1 If any portion of this bylaw is deemed *ultra vires*, illegal, invalid, or unenforceable in any way, in whole or in part, by a court or tribunal of competent jurisdiction, such decision shall not invalidate or void the remainder of this bylaw. Any portion so held to be *ultra vires*, illegal, invalid, or unenforceable shall be deemed to be reduced in scope so as to be valid and enforceable, or in the alternative to have been stricken therefrom with the same force and effect as if such portion had never been included in this bylaw.
- 14.2 Nothing in this bylaw is intended to conflict with the *Environmental Management Act*. A conflict does not exist solely because further restrictions or conditions are imposed by this bylaw or the Sewer Use Bylaw.
- 14.3 Words importing the singular number include the plural number and vice versa.

Read a first, second, and third time this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

Passed and finally adopted this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

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George V. Harvie, Chair

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Dorothy Shermer, Corporate Officer



# Food Sector Grease Interceptor Bylaw Update

Final Engagement Summary



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## Acknowledgements

Thank you to everyone who provided input on the Food Sector Grease Interceptor Bylaw update. Metro Vancouver embraces collaboration and innovation to provide sustainable regional services that contribute to a livable and resilient region and a healthy natural environment for current and future generations.

The purpose of this engagement was to find ways to enhance compliance with this bylaw that protects private property, public sewer infrastructure, human health, and the environment. Engagement sought to identify factors hindering compliance and find potential bylaw amendments that could increase compliance.

We appreciate your time, and the insights and comments you shared with us during the three phases of engagement.

## About Metro Vancouver

Metro Vancouver is a diverse organization that plans for and delivers regional utility services, including water, wastewater treatment, and solid waste management. It also regulates air quality, plans for urban growth, manages a regional parks system, provides affordable housing, and serves as a regional federation. The organization is a federation of 21 municipalities, one electoral area, and one treaty First Nation located in the region of the same name. The organization is governed by a Board of Directors of elected officials from each member jurisdiction.

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**[metrovancover.org](https://metrovancover.org)**

September 2023

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## About the Food Sector Grease Interceptor Bylaw

When fats, oils, and grease are washed down sinks and drains, they harden and lead to serious blockages. This can cause significant and costly damage to residential and commercial plumbing systems and the region's sewer system. It can also cause harm to the environment through sewer overflows. The main source of grease entering the sewer system comes from food sector establishments and residential homes. Metro Vancouver works to inform residents about the harmful effects of grease, and their role in disposing of it using their green bin, through **public education campaigns**. To manage the fats, oils, and grease coming from food sector

establishments, Metro Vancouver adopted the *Food Sector Grease Interceptor Bylaw* (No. 268) in 2012. This bylaw requires food sector establishments to have all grease-bearing fixtures connected to an appropriately sized and maintained grease interceptor. Grease interceptors separate fats, oils, and grease from wastewater and help prevent them from entering the sewer system. It's also important to note that having a properly-sized grease interceptor can protect businesses against grease blockages and the potential for resulting sewage backups, and as a result, the costs for plumbing repairs and any necessary renovations.

# About the Engagement Program

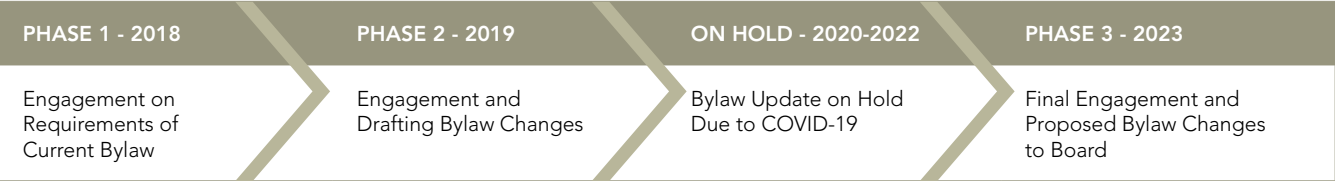
A review of the original Food Sector Grease Interceptor Bylaw (No. 268) was initiated in spring 2018. The first phase of engagement was comprised of small group meetings in late 2018 and early 2019 to discuss technical details of the bylaw, and stakeholders' experience of the current bylaw requirements. A meeting specific to Mandarin-speaking food service industry representatives was hosted based on interest from the community. The second phase occurred in late 2019 and involved engagement through working group and technical group meetings, as well as an online stakeholder survey. **During this phase of engagement, several proposed bylaw changes were developed, discussed, and generally agreed upon.**

The third and final phase of engagement on the proposed bylaw changes was intended to conclude in 2020, with engagement results and recommended bylaw amendments to be presented to Metro Vancouver's Liquid Waste Committee and Board for

review and approval. However, due to the COVID-19 pandemic, the conclusion of the bylaw review was put on hold, allowing the food services sector to concentrate on day-to-day business during a difficult time.

Metro Vancouver resumed the bylaw review and update in February 2023. A summary outlining the key themes and feedback received during the first two phases of engagement was posted online, and current members of industry were invited to comment on the proposed changes through an online survey. Stakeholders included members of the food services industry, grease interceptor manufacturers and maintenance providers, and building maintenance providers and associations. A complete list of stakeholders is included in the table below.

This report summarizes input received during all three phases of engagement, and informs the proposed bylaw changes put forward for Metro Vancouver's Liquid Waste Committee and Board's review and consideration.



The table below provides a summary of engagement activities including intended audiences.

ACTIVITY	AUDIENCE	TIMING	MEDIUM
<b>Invitation to take part in the bylaw update and engagement</b>	Food service industry and associations	Phase 1 2018	Letters, emails, phone calls, association newsletters and websites, Metro Vancouver website
<b>Small group meetings</b>	Representatives from: small/medium food service business associations, food service chains, grease haulers and maintenance providers, plumbers, grease interceptor manufacturers and maintenance providers, food waste-to-energy manufacturers, institutional kitchens, culinary schools, grocery stores, food trucks, digester and grinder industry, Building Officials Association of British Columbia	Phase 1 September – October 2018	In-person meetings
<b>Non-English speaking meetings (offered based on interest from the community)</b>	Mandarin-speaking food service industry representatives	Phase 1 October 2018	In-person meeting
<b>Online survey</b>	Food service industry and associations	Phase 1 Early 2019	Website
<b>Working group meeting</b>	Representatives from the following areas of the food sector industry: small restaurants, Mandarin-speaking food sector establishments, food sector establishment chains, plumbers, grease interceptor manufacturers and maintenance providers, grease haulers and biogas processors, food service business associations, City of Vancouver environmental bylaw enforcement	Phase 2 October 2019	In-person meeting
<b>Technical group meeting</b>	Technical representatives from the following groups: plumbers, grease interceptor manufacturers and maintenance providers, grease haulers and food waste energy processors	Phase 2 November 2019	In-person meeting
<b>Municipal engagement</b>	Local Government Fats, Oils, and Grease Working Group, Regional Engineer Advisory Committee – Liquid Waste Subcommittee	Phase 1 & 2 2018 – 2019	Presentations and discussion at regular meetings
<b>Online survey</b>	Food service industry and associations, grease haulers and maintenance providers, plumbers, grease interceptor manufacturers and maintenance providers, institutional kitchens, culinary schools, grocery stores, food trucks, Building Officials Association of British Columbia	Phase 3 February 2023	Website

# Engagement Promotion

Engagement was promoted via letters, postcards, and emails to more than 17,000 stakeholders, and on the Metro Vancouver website. In addition to Metro Vancouver promotion, industry associations shared information about engagement opportunities with their membership.

## Website

A dedicated project webpage was used to highlight information about the proposed bylaw changes and engagement. As of May 2023, there have been 4,406 visits to the project website, and 3,329 unique page views.

## Online Surveys

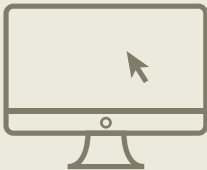
The opportunity to provide feedback in the online surveys was promoted on the Metro Vancouver website, by email and by postcard to more than 17,000 businesses and interested stakeholders, and at all meetings.

## What We Did

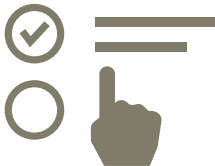
We conducted the following activities throughout engagement:



**17,350**  
stakeholders contacted  
through letters and emails



**4,406**  
visits to project website  
**3,329**  
unique page views



**62**  
online survey  
responses

# What We Heard and Metro Vancouver Response

These are some of the key themes we heard during engagement.

INTEREST AREA	WHAT WE HEARD AND HOW WE'VE RESPONDED
<b>Desire for exemptions</b>	<p><b>What we heard:</b> Requests for Metro Vancouver to consider bylaw exemptions – allowing businesses without grease interceptors, or insufficiently-sized interceptors, to remain that way if they were in existence prior to the introduction of the 2012 bylaw requirements.</p> <p><b>Response:</b> Because we're seeking continual system improvements, no exemptions are being considered. The bylaw is in place to protect the environment, sewer system, sewer workers, and the public. However, to support the food service industry, food sector establishments with existing, non-conforming grease interceptors may submit a compliance plan to Metro Vancouver for consideration, allowing them more time to come into compliance with the bylaw. The plan will need to include details on proposed modifications and an implementation schedule.</p>
<b>Installation and upgrade costs</b>	<p><b>What we heard:</b> Concerns about the cost of renovations to install or upgrade grease interceptors, as well as the potential lost revenue should the business need to close during these renovations.</p> <p><b>Response:</b> Food sector establishments with existing, non-conforming grease interceptors may submit a compliance plan to Metro Vancouver for consideration, allowing them more time to come into compliance with the bylaw. The plan will need to include details on proposed modifications and an implementation schedule.</p>
<b>Installation and upgrade costs, and the impacts of COVID-19</b>	<p><b>What we heard:</b> Restaurants faced significant financial difficulties during the COVID-19 pandemic, which they are still recovering from. Some accessed a federal Canada Emergency Business Account (CEBA) loan to remain operational and will need to pay back these loans in the coming years. The cost to install or upgrade grease interceptors to be in compliance with the bylaw could negatively impact their business in the face of multiple and competing financial demands.</p> <p><b>Response:</b> The proposed bylaw change removes some requirements from the previous bylaw (removing requirement for mop sinks and floor drains to be connected to a grease interceptor), intended to help lower the cost of grease interceptor installation. In many cases, the interceptor could be installed under the sink, rather than recessed in the floor, removing the need for extensive retrofits.</p> <p>In addition, food sector establishments may submit a compliance plan that will allow them more time to come into compliance with the bylaw. The plan will need to include details on proposed modifications and an implementation schedule.</p>
<b>Updating re-inspection and sampling fees</b>	<p><b>What we heard:</b> Concerns about increasing re-inspection and sampling fees, and the financial impact the increase could have on businesses. In other cases, questions about the financial justification for the fee increases.</p> <p><b>Response:</b> Metro Vancouver will generate no profit as a result of increases to the fees. The fees have not been updated since 2012, when the bylaw was first put in place. The increase is to better recover the operational costs of re-inspection and sampling, such as: staff time conducting work at the business and preparing inspection reports; laboratory analyses; and, vehicle mileage and gas.</p> <p>The proposed bylaw changes would increase the re-inspection fee from \$300 to \$500 (a fee charged to businesses that are in violation of the bylaw and require a re-inspection to confirm compliance). The sampling fee (charged in the event an enforcement officer needs to take samples of grease interceptor discharge) would increase from \$150 to \$300.</p>

INTEREST AREA	WHAT WE HEARD AND HOW WE'VE RESPONDED
<b>Residential versus commercial sources of fats, oils, and grease</b>	<p><b>What we heard:</b> Residential dwellings are a significant source of fats, oils, and grease in the wastewater system, and should also be addressed.</p> <p><b>Response:</b> Metro Vancouver regularly runs <b>public education campaigns</b> about keeping fats, oils, and grease out of the wastewater system. The 2022 campaign (which included a campaign website, television and online advertising, and ads on social media, YouTube, and Google) reached more than 800,000 residents</p>
<b>Alignment of standards and regulations</b>	<p><b>What we heard:</b> There is inconsistency between municipal, regional, and provincial jurisdictions when it comes to the interpretation of requirements and implementation. Suggestions made to establish a central resource that could be accessed by stakeholders to coordinate with the various jurisdictions—for example, when there is confusion regarding the precedence of building code versus bylaw requirements. Language around sizing requirements is unclear.</p> <p><b>Response:</b> Detailed information on selecting and sizing the right grease interceptor for businesses can be found on the Metro Vancouver <b>website</b>.  Metro Vancouver will consider creating a central database of the different jurisdictional requirements relevant to grease interceptors.</p>
<b>Fixtures</b>	<p><b>What we heard:</b> Questions and concerns about what fixtures are or are not required to be connected to a grease interceptor (dishwashers, glass washers and sanitizers, mop sinks, and floor drains).</p> <p><b>Response:</b> Under the proposed bylaw changes:</p> <ul style="list-style-type: none"> <li>• Floor drains and mop sinks will not have to be connected to a grease interceptor. This change is being made based on feedback from industry and because these fixtures are not considered a significant source of grease. Removing this requirement helps reduce the financial burden of retrofits.</li> <li>• Dishwashers and funnel/hub drains will have to be connected to a grease interceptor (as they are grease-bearing fixtures). However, to help reduce the burden of retrofits, the dishwasher requirement will only apply to new builds and spaces newly converted to support food service.</li> <li>• Hand sinks can be connected to a grease interceptor, but it is not a requirement. This change is being made based on feedback from industry, as many food sector establishments have hand sinks connected to grease interceptors, which is not necessary, but generally harmless. Removing the requirement that they must not be connected to the grease interceptor helps reduce the burden of extensive retrofits.</li> </ul>
<b>Sizing</b>	<p><b>What we heard:</b> Grease interceptor sizing requirements are challenging for small locations. Space is at a premium and it can be difficult to install interceptors to current standards in smaller businesses.</p> <p><b>Response:</b> Metro Vancouver reviewed and revised the <b>Grease Interceptor Selection Methodology</b> for grease interceptors in 2021. It uses 75 per cent of sink volume (instead of the previous 100 per cent) for determining the sizing of grease interceptors. As a result, smaller grease interceptors will generally be required.</p>



INTEREST AREA	WHAT WE HEARD AND HOW WE'VE RESPONDED
<b>Food grinders and digesters</b>	<p><b>What we heard:</b></p> <p>Questions about the regulation of food waste disposal units such as food grinders and digesters.</p> <p><b>Response:</b></p> <p>Food grinders are already regulated by the bylaw and are allowed — provided they are connected to a solids interceptor and then a grease interceptor. At this time, changes to how digesters and grinders are regulated under the bylaw are not being considered; however, Metro Vancouver is planning to collect more information to develop regulatory options for digester and grinder technologies in the future.</p>
<b>Markets and commissary kitchens</b>	<p><b>What we heard:</b></p> <p>Overall support for adding markets and commissary kitchens (a commercial kitchen rented by local food service operators, such as caterers and bakers) to the bylaw. Overall support for ensuring all food sector establishments are treated the same.</p> <p><b>Response:</b></p> <p>One of the proposed bylaw changes updates the definition of a food sector establishment to include markets and commissary kitchens. These are not explicitly listed in the current bylaw and this change would ensure that these emerging sectors are regulated alongside traditional restaurants to help protect the environment and the regional sewer system from fats, oils, and grease coming from these locations.</p>
<b>Increasing regulation</b>	<p><b>What we heard:</b></p> <p>Concern about increasing regulation, potentially resulting in unnecessary bureaucracy and red-tape for business-owners.</p> <p><b>Response:</b></p> <p>In large part, the bylaw changes are intended to reduce unnecessary regulation, by removing certain restrictions and requirements, thereby giving the food sector industry more flexibility to comply with the bylaw. For example, one of the changes removes the requirement for floor drains and mop sinks to be connected to a grease interceptor, as they generally pose a lower risk for sewer blockages. Removing this requirement helps reduce the burden of extensive retrofits since sub-floor construction may require additional structural and seismic considerations.</p>
<b>Fines and compliance</b>	<p><b>What we heard:</b></p> <p>The incentive to comply with the bylaw is low as inspection resources are limited, and fines are nominal and rare, particularly in comparison with the cost of renovations. Suggestion to provide a financial incentive program to encourage compliance, such as rebates for completing grease interceptor upgrades.</p> <p><b>Response:</b></p> <p>Metro Vancouver works first to encourage compliance through education and working with business owners. If there are instances of repeated non-compliance, Metro Vancouver has several tools to respond. Metro Vancouver recently obtained authority to levy financial penalties for non-compliance and is in the process of drafting new policies for this enforcement tool. Repeated non-compliance of the bylaw can result in prosecution.</p> <p>Financial incentives to improve compliance are not being considered, as having a properly-sized grease interceptor is a regulatory requirement to protect the sewer system and the environment.</p>

INTEREST AREA	WHAT WE HEARD AND HOW WE'VE RESPONDED
<b>Preferred hauler program</b>	<p><b>What we heard:</b></p> <p>A preferred hauler program was suggested, where approved grease interceptor maintenance providers could electronically submit confirmation that an establishment's grease interceptor is in compliance and being maintained.</p> <p><b>Response:</b></p> <p>While this suggestion is not being pursued as part of this bylaw update, Metro Vancouver may look at developing a voluntary hauler program or other initiatives in the future.</p>
<b>Efficacy of grease interceptor in high temperature dishwashers</b>	<p><b>What we heard:</b></p> <p>Questions about the new requirement to connect dishwashers (in new builds and spaces newly converted to food service only) and whether the high temperature of a dishwasher's wash and rinse water will liquefy grease, causing it to bypass the grease interceptor, and render the interceptor ineffective.</p> <p><b>Response:</b></p> <p>The high temperature of dishwashers may impact the efficacy of the grease interceptor to trap the grease coming from the dishwasher. However, as dishwashers are a source of grease, it is necessary to have them connected to a grease interceptor to trap as much grease as possible. To reduce the burden of extensive retrofits, this new requirement only applies to new builds and spaces newly converted to food service.</p>
<b>Location of grease interceptor</b>	<p><b>What we heard:</b></p> <p>Suggestion that grease interceptors be allowed to be installed outdoors. Suggestion that the best place to install a grease interceptor is by the sink in the kitchen, and concern that in some cases, grease interceptors are installed in hard to service areas of buildings, such as the basement or underground parking.</p> <p><b>Response:</b></p> <p>The bylaw allows for interceptors to be installed outside; this will not change.</p> <p>For installation of grease interceptors in harder to access areas of buildings, the proposed bylaw change that will remove the requirement to connect grease interceptors to mop sinks and floor drains should reduce the number of grease interceptors installed underground.</p>
<b>Maintenance requirements</b>	<p><b>What we heard:</b></p> <p>Request that Metro Vancouver reconsider the bylaw requirement that grease interceptors be cleaned every three months.</p> <p><b>Response:</b></p> <p>During a previous bylaw review, Metro Vancouver staff considered grease interceptor sizing based on how much grease a business generated; however, this would be difficult to assess accurately, and poses challenges for effective monitoring and enforcement, as food sector establishments experience high turnover, and grease production could change. For this reason, the three month cleaning requirement remains.</p>



## How Feedback Was Used

Informed by this feedback and other policy requirements, Metro Vancouver staff developed the proposed bylaw amendments considered by Metro Vancouver's Liquid Waste Committee and Board for approval in fall 2023.



# INPUT CONSIDERATION SUMMARY REPORT

## Glossary

**Canadian Standards Association (CSA)** is a not-for-profit standards development organization that develops and maintains consensus standards to help protect the health and safety of Canadians, enhance Canadians' quality of life, protect the environment, and facilitate trade.

**Fats, oils, and grease (FOG)** harden and lead to serious blockages when they are washed down sinks and drains. This can cause significant and costly damage to residential and commercial plumbing systems and the region's sewer system. It can also cause harm to the environment through sewer overflows.

**Food sector establishments (FSEs)** are any businesses involved in food preparation and service, discharging fats, oils and grease into the sewer system, such as restaurants, commissary kitchens, markets, and other similar establishments.

**Food Sector Grease Interceptor (FSGI) Bylaw** has been in place since 2012 to manage the fats, oils, and grease coming from food sector establishments by setting out requirements for all grease-bearing fixtures to be connected to an appropriately-sized and maintained grease interceptor.

**Gallons per minute (GPM)** is the unit of measurement for how fast liquid flows – in this case, through a plumbing system.

**Grease interceptors (GIs)** are devices installed as part of the plumbing system at food sector establishments that separate fats, oils, and grease from wastewater, helping to prevent them from entering the sewer system.

**Greater Vancouver Sewerage and Drainage District (GVS&DD)** is one of the four legal entities that make up Metro Vancouver, with the responsibility for providing regional sewerage and drainage services, while protecting human health and the environment.

**Metro Vancouver (MV)** is a federation of 21 municipalities, one electoral area, and one treaty First Nation that collaboratively plans for and delivers regional-scale services. Its core services are drinking water, wastewater treatment, and solid waste management. Metro Vancouver also regulates air quality, plans for urban growth, manages a regional parks system, and provides affordable housing.

**Mixed commercial units (MCU)** are buildings where offices or residences typically occupy upper floors, with commercial businesses occupying the space below.

**Sewage Control Manager** is a Metro Vancouver or City of Vancouver employee, appointed by the GVS&DD Board under the *Environmental Management Act* and the *Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw* No. 299, 2007 to regulate non-domestic discharges to sanitary sewers to protect human health, the environment, and the sewer system.

## 1. Phase 1 – Small Group Meetings and Online Survey (2018)

The following considerations were raised in 10 small group meetings, including one offered in Mandarin (held September – October 2018) and an online survey (held in early 2019), and reflect comments, questions, and issues provided. Similar questions, suggestions, and concerns have been grouped together for response from Metro Vancouver.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Exemptions				
1	Requests for exemption of businesses existing prior to 2012	Small/Medium Food Sector Establishments (FSE) working group (Sept 24, 2018) Chains and Business Associations working group (Sept 25, 2018) Mandarin FSE working group (Oct 2, 2018)	Consider exemptions for establishments without grease interceptors or insufficiently-sized grease interceptors who were doing business prior to the introduction of the 2012 bylaw requirements.	Exemptions are not being considered. The bylaw is in place to protect the environment, sewer system, sewer workers, and the public.  To support the food service industry, food sector establishments with existing, non-conforming grease interceptors (GIs) may submit a compliance plan to Metro Vancouver (MV) for consideration, allowing them more time to come into compliance with the bylaw.  The plan will need to include details on proposed modifications and an implementation schedule.
Cost of upgrades and maintenance				
2	Installation and upgrade costs	Small/Medium FSE working group (Sept 24, 2018) Chains and Business Associations working group (Sept 25, 2018) Mandarin FSE working group (Oct 2, 2018)	Cost of renovations, and loss of revenue due to business closure to make upgrades, creates barriers to compliance for some FSEs. Concern that restaurants cannot bear the high cost of renovations.	Food sector establishments with existing, non-conforming grease interceptors may submit a compliance plan to Metro Vancouver (MV) for consideration, allowing them more time to come into compliance with the bylaw. The plan will need to include details on proposed modifications and an implementation schedule.  The cost of installing a GI is expected to decrease with the proposed bylaw change updating which fixtures must be connected to a GI. Not requiring mop sinks and floor drains to be connected means that interceptors can likely be installed under the sink, rather than recessed in the floor.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
3	Residential vs. commercial sources of fats, oil, and grease	<p>Small/Medium FSE working group (Sept 24, 2018)</p> <p>Chains and Business Associations working group (Sept 25, 2018)</p> <p>Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)</p>	Residential dwellings are a source of fats, oil and grease (FOG) in the wastewater system.	<p>MV works to inform residents about the harmful effects of grease and their role in disposing of it in their green bin through public education campaigns.</p> <p>To manage the fats, oils, and grease coming from food sector establishments, MV adopted the Food Sector Grease Interceptor (FSGI) Bylaw (No. 268). The scope of this bylaw does not include regulating residential dwellings. Based on feedback from municipalities, MV has identified “hot spot” areas where there are larger build-ups of FOG. These areas have a higher concentration of FSEs, which handle large volumes of foods containing FOG.</p>
4	Design and planning for new builds	<p>Small/Medium FSE working group (Sept 24, 2018)</p> <p>Chains and Business Associations working group (Sept 25, 2018)</p> <p>Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)</p>	Developers and engineers are not adequately addressing grease interceptor requirements for new builds during planning and design, especially in mixed commercial units (MCU) that may have food sector tenants in the future.	MV will consider the creation of educational materials to share on the MV website that stakeholders such as building maintenance associations, developers, engineers, and municipal permitting/licensing staff can reference.
5	Fines	Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)	The incentive for an FSE to implement high cost renovations to be compliant with the bylaw is low. The possibility and/or frequency of inspections, and the cost of potential fines are not considered a deterrent.	MV recently obtained authority to levy financial penalties for non-compliance and is in the process of drafting new policies for this enforcement tool.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Selection (Sizing)				
6	Methodology and bylaw language	<p>Small/Medium FSE working group (Sept 24, 2018)</p> <p>Chains and Business Associations working group (Sept 25, 2018)</p> <p>Mandarin FSE working group (Oct 2, 2018)</p> <p>Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)</p>	Language around GI sizing requirements is unclear. Consideration should be given to adopting Canadian Standards Association (CSA) standards.	<p>In response to feedback received from industry representatives during this engagement, MV reviewed and revised the sizing methodology for GIs in March 2021. It is now called the Grease Interceptor Selection Methodology, and uses 75 per cent of sink volume for determining the sizing of GIs (compared to 100 per cent previously).</p> <p>The Grease Interceptor (GI) Selection Methodology can be found here:</p> <p><a href="https://metrovancover.org/services/liquid-waste/Documents/approved-grease-interceptor-selection-methodology.pdf">https://metrovancover.org/services/liquid-waste/Documents/approved-grease-interceptor-selection-methodology.pdf</a></p> <p>Please note that MV plans to further revise the methodology in the near future to address GIs capable of a rated flow of over 100 US gallons per minute (GPM).</p>
Fixtures				
7	Connected fixture requirements	<p>Chains and Business Associations working group (Sept 25, 2018)</p> <p>Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)</p>	Questions about the rationale for requiring dishwashers, glass washers, and sanitizers to be attached to a grease interceptor, as hot water can reduce the efficacy of a GI.	Glass washers and sanitizers are not required to be attached to a GI. Dishwashers (in new builds or spaces converted to FSEs) are required to be connected to a grease interceptor as they are grease-bearing fixtures.



#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
8	Connected fixture requirements	Chains and Business Associations working group (Sept 25, 2018)  Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)	Concern about the current bylaw's requirement for mop sinks and floor drains to be connected to GIs.	We are proposing that mop sinks and floor drains do not require a connection unless they are being used for FOG disposal.
Regulatory Requirements				
9	Inconsistency between provincial, municipal and regional jurisdictions	Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)	Comments about the inconsistency among municipal, regional, and provincial jurisdictions, with differing interpretations of requirements and implementation.  Lack of coordination between jurisdictions has resulted in work delays.  Engineers identified challenges in developing plans that incorporate existing grease interceptor sizing requirements.  Suggestion to create a central resource that establishments could access to coordinate the various jurisdictional requirements.	MV will consider creating a central database on the MV website of the different jurisdictional requirements relevant to GIs.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
10	Installation and access	Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)	Some establishments are constrained by the amount of space available to install grease interceptors on their property.	<p>In response to feedback received from industry representatives during this engagement, MV reviewed and revised the sizing methodology for interceptors in March 2021. It is now called the Grease Interceptor Selection Methodology, and uses 75 per cent of sink volume for determining the sizing of GIs (compared to 100 per cent previously).</p> <p>The Grease Interceptor (GI) Selection Methodology can be found here:  <a href="https://metrovancover.org/services/liquid-waste/Documents/approved-grease-interceptor-selection-methodology.pdf">https://metrovancover.org/services/liquid-waste/Documents/approved-grease-interceptor-selection-methodology.pdf</a></p>
11	Installation and access	<p>Haulers and Maintenance Providers working group (Oct 3, 2018)</p> <p>Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)</p>	Haulers and plumbers encounter access challenges, based on the location of the grease interceptor.	The proposed bylaw change updating which fixtures must be connected to a grease interceptor should improve access to newly installed GIs. Not requiring mop sinks and floor drains to be connected to a GI means that interceptors can likely be installed under the sink, rather than recessed in the floor.
12	Monitoring, reporting, and enforcement	<p>Small/Medium FSE working group (Sept 24, 2018)</p> <p>Chains and Business Associations working group (Sept 25, 2018)</p> <p>Plumbers, Interceptor Maintenance Providers and Manufacturers working group (Oct 12, 2018)</p>	<p>Provide guidelines or certifications for hauler/maintenance companies.</p> <p>Create a reporting template for FSEs and haulers/plumbers. Develop an approved/preferred haulers list with qualified grease interceptor contractors.</p> <p>Plumbers and hauling companies can support monitoring and compliance.</p>	Although not part of the bylaw review, based on this feedback, MV is investigating the possible development of a voluntary Preferred Hauler Program or other initiatives.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Increase Compliance				
13	Incentives	Small/Medium FSE working group (Sept 24 2018)	Create financial or economic incentives to help offset the investment required by FSEs to achieve compliance.	The bylaw, which has been in place since 2012, helps protect the environment, sewer system, sewer workers, and the public. MV is unable to offer financial incentives to support compliance.
14	Business licencing	Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)	Suggestion to include information on compliance with business licence renewals. Suggestion that approval of municipal business licences could be conditional on compliance with the grease interceptor bylaw.	As the business permitting system is the jurisdiction of municipalities, the suggested system may not work for all municipalities. The objective is to create a regional bylaw enforceable in all jurisdictions.
15	Education and awareness	Plumbers, Interceptor Maintenance Providers, and Manufacturers working group (Oct 12, 2018)	Plumbers, haulers, and health agencies could support with distribution of education materials.	Metro Vancouver would be pleased to share education materials as requested.
16	Digesters	Chains and Business Associations working group (Sept. 25, 2018) Plumbers, Interceptor Maintenance Providers and Manufacturers working group (Oct 12, 2018) Haulers and Maintenance Providers working groups (Oct 3, 2018)	There are very few examples of digesters used in the region. The units tend to be expensive and maintenance requirements are high. Some larger establishments have considered purchase/installation.	FSEs considering installation of such units should contact Metro Vancouver Environmental Regulation & Enforcement to determine any regulatory requirements under the Greater Vancouver Sewerage and Drainage District (GVS&DD) Sewer Use Bylaw for discharge to sewer.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
17	Bylaw awareness	Online survey (early 2019)	<p>A variety of responses indicate the following points:</p> <ul style="list-style-type: none"> <li>- The majority of FSEs have a basic knowledge of the requirements of the bylaw, but a GI is not an active part of their business protocols until it needs to be serviced.</li> <li>- GIs are not a priority in regular FSE operations and they do not visit the Metro Vancouver website for information.</li> <li>- For FSE operators, the main source of GI information comes from those who work directly on their GI (haulers, maintenance providers, plumbers).</li> </ul>	MV will investigate working with industry to develop educational materials for FSEs regarding GI maintenance requirements and make them available on the MV website, and upon request to plumbers, haulers and health agencies for distribution to their clients.

## 2. Phase 2 – Working Group and Municipal Meetings (2019)

The following considerations were raised during the working group meeting (October 22, 2019), the technical group meeting (November 4, 2019), the municipal group meeting (November 13, 2019), and individual stakeholder interviews (November 20, 2019), and reflect comments, questions, and issues provided. Similar

questions, suggestions and concerns have been grouped together for response from Metro Vancouver.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Selection (Sizing)				
18	Regulatory sizing disparity	Working Group (Oct. 22, 2019)	The Canadian Standards Association (CSA) doesn't test above 100 gallons per minute (GPM) and the sizing methodology can require 250 GPM. Any interceptor graded above 250 GPM is approved by the manufacturer, not CSA.	The proposed bylaw standards will allow other industry standards in addition to CSA, such as the American Society of Mechanical Engineers (ASME), International Association of Plumbing and Mechanical Officials (IAPMO), American National Standards Institute (ANSI) or alternative methods or standards approved by a Sewage Control Manager.
19	Educational resources	Working Group (Oct. 22, 2019)	Information sheets for sizing calculation should be made available to haulers/maintenance providers to determine proper sizing. Request to have tool that will also work offline.	In response to this feedback, the "Grease Interceptor Selection (Sizing) Tool" can be found on the Metro Vancouver Grease Interceptor Regulatory Program website: <a href="https://metrovancover.org/services/environmental-regulation-enforcement/liquid-waste-regulatory-program/grease-interceptor-sizing-tool">https://metrovancover.org/services/environmental-regulation-enforcement/liquid-waste-regulatory-program/grease-interceptor-sizing-tool</a> MV will consider creating an offline tool.
20	Sizing methodology	Technical Group (Nov. 4, 2019)	In-series interceptors (two connected GIs) ) should be considered in the proposed sizing methodology.	The CSA standard and the current MV sizing methodology does not include in-series grease interceptors. These would need to be considered as one-off applications by the Sewage Control Manager.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
21	Sizing	Technical Group (Nov 4, 2019)	Request for consideration of GI sizing based on the grease production of a particular business (e.g. sandwich shop vs. pizza shop).	During a previous bylaw review, Metro Vancouver staff considered production-based grease interceptor sizing (e.g. basing GI sizing on how much grease a particular business generates), however that type of classification posed challenges for monitoring and enforcement as FSEs experience high turnover. Changes to existing businesses may increase or decrease their levels of FOG output.
22	Regulatory requirements	Municipal Meeting (Nov 13, 2019)	Alignment of sizing methodology with CSA standard will make things easier for inspections officials. Important to note that CSA sizing is a minimum and that a larger size unit can be required.	MV has aligned with CSA standard to create consistency across jurisdictions.
23	Enforcement	Municipal Meeting (Nov 13, 2019)	Ensuring sizing requirements are met can be challenging. Equipment can be replaced with a different size unit after a plumbing inspection.	MV acknowledges the challenges officers experience. The intent of the bylaw revisions is to provide FSEs more clarity and flexibility to encourage increased compliance.
24	Fixture specifications	Municipal Meeting (Nov 13, 2019)	The manufacturer's peak flow rates for fixtures, such as dishwashers, are used for determining sizing of grease interceptor.	MV supports this peak flow sizing methodology.
25	Stakeholder groups	Municipal Meeting (Nov 13, 2019)	The number of food trucks (i.e. size of client base) using a particular commissary kitchen needs to be considered when determining sizing of grease interceptor for such facilities. A specific definition for grease interceptors used for this purpose may be needed.	Comment noted. MV is planning to gather more information about food trucks and their operations before coming up with an appropriate regulatory approach for them. In the interim, if food truck owners/operators require guidance on the disposal of their FOG or greywater, please contact Metro Vancouver Environmental Regulation & Enforcement.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Regulatory Requirements				
26	Preferred haulers	Working Group (Oct 22, 2019)	If MV implements a software system that allows submission of maintenance records by FSE or maintenance providers, MV should take into consideration that haulers/maintenance providers can only act on the direction of their clients to submit documents.	Although not part of this bylaw review, MV is looking into the possible development of a voluntary Preferred Hauler Program or other initiatives.
27	Timeline	Working Group (Oct 22, 2019)	Questions about timing of proposed bylaw to come into effect.	The bylaw amendments are scheduled to go to the GVS&DD Board in Q3/Q4 2023 for consideration. The new bylaw would come into effect once it is Board approved.
28	Regulatory requirements	Technical Group (Nov 4, 2019)	The BC Plumbing Code doesn't outline required sizing for grease interceptors.	The 2018 Plumbing Code now references the CSA standard for sizing. The previous version did not.
29	Regulatory requirements	Technical Group (Nov 4, 2019)	The CSA standard cuts off at 100 GPM rated flow. Will the limit be updated?	MV is continuing communication with CSA regarding updates to their standard. The Grease Interceptor Selection Methodology allows for other standards when rating GI flow capacities, including those over 100 GPM.
30	Industry standards	Technical Group (Nov 4, 2019)	Will the revised bylaw language remain flexible enough to incorporate new or updated industry standards?	The proposed bylaw amendments aim to make the bylaw language flexible. Future changes to industry standards can be incorporated through an administrative bylaw amendment that can be expedited through the Board.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
31	Jurisdiction requirements	Technical Group (Nov 4, 2019)	Is the Vancouver Building Bylaw included in references to the BC Building Code?	The Vancouver Building Bylaw is included when referencing the BC Building Code.
32	Timeline	Technical Group (Nov 4, 2019)	Is alignment between CSA and the new Building Code effective now?	Yes. The BC Building Code 2018 requires that GIs conform to the CSA B481.3 standard.
33	Stakeholders	Technical Group (Nov 4, 2019)	During your engagement process did Metro Vancouver consult with range hood operators and determine how they discharge their FOG? In some circumstances, hood cleaning providers will discharge into the floor drain during non-working hours.	MV met with several stakeholder groups, including GI maintenance providers, but did not consult with specific fixture manufacturers.  Wastewater from manual hood cleaning should be collected for offsite waste management. Otherwise, if wastewater from manual hood cleaning is discharged to a floor drain, that floor drain must be connected to a GI.
34	Regulatory challenges	Technical Group (Nov 4, 2019)	Engineers encounter difficulty securing a “Will Comply” letter in situations where a building is designed to accommodate an FSE tenant, but a tenant has not yet been secured. Could you implement an approval for “Will Comply” letters for a minimum of 500 GPM rated flow to secure approval from an inspector?	We cannot issue letters of conformity without knowing the flow requirements, since the bylaw requires that GIs comply with sizing methodology based on the connected fixtures (a known volume). MV will consider further meetings with municipalities on this subject.
35	Compliance	Technical Group (Nov 4, 2019)	Does Metro Vancouver issue permits for grease interceptors to FSEs? Other jurisdictions have found this as an effective tool to enforce compliance.	FSEs in MV operate under the regulations of the bylaw, and permits are not issued. There would be significant resourcing implications to both FSEs and MV to implement a permitting system.



#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
36	Hauler regulation	Technical Group (Nov 4, 2019)	How are grease haulers/maintenance providers regulated in discharging grease?	MV does not have the authority to regulate haulers/maintenance providers, only those entities that discharge into the sewer system or at wastewater treatment plants. Haulers that discharge at MV's wastewater treatment plants are regulated under the GVS&DD Trucked Liquid Waste bylaw.
37	Alternate technologies	Technical Group (Nov 4, 2019)	Engineers are being asked to develop designs with digesters in conjunction with grease interceptors. Will these technologies be allowed?	FSEs considering installing these types of units should contact Metro Vancouver Environmental Regulation & Enforcement to determine any regulatory requirements for discharging to the sewer system under the GVS&DD Sewer Use Bylaw.
38	Alternate technologies	Technical Group (Nov 4, 2019)	Is industry prohibited from using enzymes in a grease interceptor?	The current bylaw prohibits the use of enzymes in a grease interceptor and their discharge into the sewer system. The revised bylaw will maintain this prohibition.
39	Regulatory protocol	Technical Group (Nov 4, 2019)	When proposed recommendations are presented to the Board, can the public oppose or comment at that time?	Anyone can apply to appear as a delegation before a Metro Vancouver Committee or Board to speak on a particular topic or agenda item. Information on the process is included on the MV website: <a href="https://www.metrovancouver.org/services/environmental-regulation-and-enforcement/delegation.aspx">Speaking to a Board or Committee (metrovancouver.org)</a>
40	Alternate technologies	Stakeholder Interview (Nov 20, 2019)	Manufacturer concerns that the bylaw discourages certain grease removal technology as it requires floor drains and mop sinks to be connected to the GI.	In the proposed bylaw revision, floor drains and mop sinks are being removed from the list of fixtures that must be connected to a GI, unless they are being used for FOG disposal

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
41	Alternate technologies	Stakeholder Interview (Nov 20, 2019)	Manufacturer requested direction about specific GI technologies being accepted as part of the bylaw.	Any GI technology, or other FOG-removing technology must be demonstrated to meet all the requirements of the bylaw to be acceptable. As a regulator, Metro Vancouver does not promote one technology over another.
42	Regulatory applications	Stakeholder Interview (Nov 20, 2019)	Request for MV to provide clarity about the permitting process for new builds and renovations.	MV will continue to work with municipalities to ensure that their permitting processes for FSEs refers proponents to MV for questions about FSGI bylaw requirements.
43	Regulatory requirements	Municipal Meeting (Nov 13, 2019)	Plumbing officials will refer to the edition of the CSA Standard cited in the BC Plumbing Code, unless the Ministry of Municipal Affairs and Housing directs otherwise, which is unlikely. The next BC Plumbing Code update is anticipated to be in 2022.	MV will note the next revision of the BC Plumbing Code.
44	Exemption program	Municipal Meeting (Nov 13, 2019)	In regards to the proposed non-conforming grease interceptor program, the registration would need to be with the property, not the business, as there can be high turnover in the industry.	MV is no longer considering the previously proposed non-conforming grease interceptor program. MV will still allow food sector establishments with existing, non-conforming grease interceptors to submit a compliance plan to Metro Vancouver for consideration. The plan will need to include details on proposed modifications and an implementation schedule.
45	Stakeholders	Municipal Meeting (Nov 13, 2019)	Communication with property owners/landlords about the FSGI bylaw and GI requirements will be important in addition to communication with businesses.	MV has resources and information on its website about the FSGI bylaw and GI requirements. It is the responsibility of individual FSEs to ensure they are compliant with bylaw conditions.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
46	Education and awareness	Municipal Meeting (Nov 13, 2019)	Often, prospective property or business owners are not aware of what upgrades will be required to bring the premises in compliance with applicable bylaws and codes.	MV has resources and information on its website about the FSGI bylaw and GI requirements. Before purchase, prospective buyers of an FSE facility should determine any outstanding regulatory requirements, including those under the FSGI bylaw.
Increase Compliance				
47	Enforcement	Working Group (Oct 22, 2019)	Clarity around enforcement mechanisms is needed. Haulers and maintenance providers are able to identify undersized or non-compliant units, but smaller customers may not be motivated to comply if upgrade costs outweigh enforcement penalties.	<p>The inspection process starts with an enforcement officer conducting a site visit. Any issues of non-compliance are discussed; MV then sends a formal letter itemizing compliance issues. Should an FSE continue to be non-compliant, MV works through the plumbing and building codes to encourage compliance.</p> <p>MV is allowing FSEs with existing, non-conforming grease interceptors to submit a compliance plan to Metro Vancouver for consideration. The plan will need to include details on proposed modifications and an implementation schedule.</p>
48	Effectiveness of proposed amendments	Technical Group (Nov 4, 2019)	Will the proposed revisions reduce the amount of grease entering the system?	The proposed changes aim to increase compliance by improving clarity and removing restrictions that have minimal impact on FOG production. Achieving greater compliance would help reduce the amount of grease entering the system.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
49	Compliance and enforcement	Technical Group (Nov 4, 2019)	Has Metro Vancouver considered something similar to the back-flow prevention system?	The bylaw requires grease interceptor maintenance records be kept on the premises. A robust program similar to the back-flow prevention system (a program in some jurisdictions that requires the testing of back flow preventers and submission of the test results) would require significant resources.
Retroactivity				
50	Timeline	Technical Group (Nov 4, 2019)	Do these proposed bylaw changes apply to existing GIs? Is this proposal an idea or is it currently in effect?	The 2012 bylaw already requires all FSEs to have a properly-sized GI installed and maintained. That is not changing. The proposed bylaw revisions add clarity and flexibility to the existing bylaw and will be presented to the Board for their consideration. These revisions will apply to all FSEs and GIs (new or existing) and go into effect once Board approval is obtained.
51	Timeline	Technical Group (Nov 4, 2019)	Is the recommendation to continue normal operations until the bylaw is adopted?	The current bylaw is in effect until the new bylaw is voted on by the Board, likely in Q3/Q4 2023.
Fixtures				

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
52	Connected fixtures	Working Group (Oct 22, 2019)	Floor drains and mop sinks are not generally high generators of FOG. Suggestion to remove the requirement for their connection to a GI.	<p>Based on this feedback, MV is proposing to remove this requirement from the bylaw. The following fixtures will not be required to connect to a grease interceptor:</p> <ul style="list-style-type: none"> <li>- Floor drains used only to convey water or wastewater from wash downs and spills</li> <li>- Mop sinks or janitor sinks used solely for washing and cleaning purposes</li> <li>- Hand sinks</li> </ul> <p>Note, these fixtures are only exempt if they are not attached to a grease bearing fixture.</p>
53	Stakeholder groups	Technical Group (Nov 4, 2019)	Has Metro Vancouver considered regulating the use of food waste disposal units?	Food grinders are regulated by the BC Plumbing Code 2018 and are allowed by the FSGI bylaw provided they are connected to a solids interceptor followed by a GI.
54	Fixture specifications	Technical Group (Nov 4, 2019)	When it comes to floor drains and mop sinks, can Metro Vancouver confirm the proposed revisions will remove simultaneous (all fixtures drain at once) versus non-simultaneous flow when accounting for GI sizing?	The proposed bylaw amendments remove the requirement for mop sinks and floor drains to be connected to a GI unless they are attached to a grease-bearing fixture. Existing mop sinks and floor drains can stay connected, as long as they are accounted for as non-simultaneous flows.
55	Fixture specifications	Technical Group (Nov 4, 2019)	Can Metro Vancouver confirm that the new bylaw requirements will align with CSA load standard of 75 per cent and will still be requiring one-minute drain time?	Yes. MV's Grease Interceptor Selection Methodology aligns with CSA standard of 75 per cent for sinks and will still require a one-minute drain time.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
56	Connected fixtures	Technical Group (Nov 4, 2019)	What are the requirements regarding existing kitchens that require new fixtures, such as dishwashers?	Any new grease-bearing fixture in an existing kitchen must be connected to a GI (a list of fixtures that must be connected to a GI is included in the bylaw). The only exception is dishwashing equipment. New dishwashers being installed in existing kitchens do not have to be connected to a GI – this is to reduce the burden of extensive retrofits on existing businesses. Dishwashers in new builds or spaces newly converted to food service, however, must connect to the GI.
57	Fixture specifications	Technical Group (Nov 4, 2019)	Will the rate of flow for dishwashers be determined by the manufacturers' specifications on discharge? And in cases where a pre-rinse sink is upstream of the dishwasher, will both fixtures require connection?	The rate of flow is determined by the manufacturer's specifications and both fixtures need to connect to a grease interceptor.
58	Fixture's intended purpose	Technical Group (Nov 4, 2019)	How will Metro Vancouver approach fixtures that are not being used as specified by the manufacturer?	At the inspecting officer's discretion, any grease-bearing fixture can be required to be connected to a GI, despite manufacturer specifications. For example, if a grease-bearing fixture is connected to a floor drain, that drain or fixture must be connected to a GI.
60	Grease interceptor specifications	Technical Group (Nov 4, 2019)	Generally, engineers will include in-series interceptors to increase capacity that can't be achieved through one unit. Often seen in large restaurants that need higher capacity and cannot get it through one GI. Some engineering firms have designs for in-series interceptors. Will the new bylaw consider allowing in-series grease interceptor?	To have an in-series interceptor considered, engineering firms must submit their designs in an application to the Sewage Control Manager for consideration.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
61	Other technologies	Technical Group (Nov 4, 2019)	What is Metro Vancouver's policy for units that separate FOG at source?	The bylaw focuses on GIs as the most commonly used technology to remove FOG from the wastewater stream. FSEs interested in using an alternative technology that separates FOG at the source should contact Metro Vancouver Environmental Regulation & Enforcement to discuss details specific to that technology.
62	Multiple FSEs per grease interceptor	Technical Group (Nov 4, 2019)	Does the current bylaw, or the revisions proposed, address FSEs sharing a grease interceptor? Many jurisdictions do not allow GIs to be shared.	The bylaw and the proposed changes allow for multiple FSEs to use the same GI. Any GI that is connected to multiple establishments must comply with sizing methodology based on flows from all connected fixtures. Shopping malls often have several FSEs using the same GI. In some cases, these FSEs have a smaller GI installed directly on their premises that leads to a larger GI maintained by the mall.
63	Maintenance	Technical Group (Nov 4, 2019)	Does MV have a way to specify the maintenance schedule of individual FSEs? A potential issue with the required 90-day maintenance schedule is that some FSEs may interpret that minimum as the only requirement and not monitor the grease interceptor, as needed.	The maintenance schedule of 90 days is the maximum amount of time an FSE can allow between GI maintenance, in combination with maintaining less than 25 per cent FOG and solids levels at any given time. FSEs must ensure their GI is compliant and being maintained properly. Many FSEs rely upon their maintenance provider to determine FOG percentage levels. The Sewage Control Manager can also direct FSEs to examine and clean a GI at any time.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
64	Maintenance	Technical Group (Nov 4, 2019)	<p>The challenge with the 25 percent capacity maintenance requirement is that newer technologies are able to hold a higher percentage of FOG without reaching capacity. An FSE owner who invested in a higher capacity GI to prevent additional maintenance costs is still being required to pay for maintenance at 25 per cent FOG levels, paying for unnecessary maintenance and losing their investment in better technology. The standards proposed appear to cater to lower capacity grease interceptors and don't take into account newer technologies with higher capacities. CSA dictates cleaning a grease interceptor every four weeks, but this standard is not in a mandatory section.</p> <p>Suggestion to set the maintenance schedule as either 90 days, or 25 per cent of capacity, or to the manufacturer instructions. For those using manufacturers' instructions, the bylaw would rely on those instructions to set the maintenance schedule. Maintenance requirements could be in accordance with manufacturers recommendations. Accepted manufacturers could be approved by the Sewage Control Manager for a different percentage of capacity.</p>	<p>The Sewage Control Manager has the flexibility to make these kinds of decisions. The FSGI bylaw is a set of rules that apply in most situations, and allows for consideration of exceptions where applicable. MV will consider higher capacity GI percentages in accordance with manufacturers' instructions. The FSE would need to demonstrate compliance according to manufacturers' maintenance requirements to enforcement officers.</p> <p>To advocate for consistency across jurisdictions, companies are advised to write to the CSA and request that the percentages of higher capacity GIs be written into a Canadian standard so Sewage Control Managers across the country can rely on the same thing.</p>
65	Maintenance	Technical Group (Nov 4, 2019)	Who is measuring FOG percentages in GIs?	The FSE is responsible for proper maintenance and monitoring of their GI. Based on engagement feedback, FSEs primarily rely on their maintenance provider to inform them of their GI's FOG percentage levels.



#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
66	Jurisdiction regulatory requirements	Municipal Meeting (Nov 13, 2019)	If the local jurisdiction requires dishwashers to connect to a GI, then Section 5.3 of the CSA Standard is triggered, which says that the dishwasher must be served by a dedicated grease interceptor. A separate grease interceptor for the dishwasher is preferred due to the heat of the water.	The proposed bylaw revision requires dishwashers in new builds (or newly converted spaces) to connect to a GI, but it does not have to be dedicated. FSEs must follow any municipal requirements for dedicated dishwasher GIs.
67	Connected fixtures	Municipal Meeting (Nov 13, 2019)	Why are mop sinks not required? Inspectors frequently witness these sinks being used for cleaning.	Findings from inspections show that most FSEs use mop sinks for general cleaning, not cleaning grease-laden items.  The proposed bylaw change still requires GI connection if a mop sink or floor drain is used to dispose of wastewater containing FOG. Enforcement officers can require connection if an inspection reveals this to be the case.
68	Connected fixtures	Municipal Meeting (Nov 13, 2019)	The BC Plumbing Code says that connection of mop sinks is not required if the mop sink is not located in a kitchen.	Under the proposed bylaw amendments, a mop sink will not be required to connect to a grease interceptor in either case.
69	Connected fixtures	Municipal Meeting (Nov 13, 2019)	Connecting mop sinks to a GI should be a requirement in new builds or if doing extensive renovations, as there is ability in design process to accommodate placement of the grease interceptor.	MV has determined that, in general, only a small amount of FOG enters the system via mop sinks. The proposed bylaw amendment will not require a connection to a GI.
70	Alternate technologies	Municipal Meeting (Nov 13, 2019)	How much maintenance is required for food grinders and digesters?	There are no requirements in the bylaw for food grinder/digester maintenance.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
71	Alternate technologies	Municipal Meeting (Nov 13, 2019)	The BC Plumbing Code defines a “fixture” as something that discharges sewage or a substance that is not “clear water waste”, so food grinders and digesters fall under the definition of a “fixture”. Fixtures have to conform to the standards in the BC Plumbing Code. Food grinders and digesters could be considered an “alternative solution” provided they meet the functional statements/objectives/intent of that section of the BC Plumbing Code.	From a bylaw perspective, MV needs to determine if the discharge from food grinders and digesters is higher strength waste before determining the potential regulatory approaches for these systems.
72	Alternate technologies	Municipal Meeting (Nov 13, 2019)	Fraser Health may have some regulation or requirements around food grinders and digesters, as the health officers review each kitchen plan for compliance.	Comment noted.
Cost of upgrades and maintenance				
73	Fees	Working Group (Oct 22, 2019)	Currently FSE owners/operators are paying a large amount of fees to various regulators.	Fees associated with the FSGI bylaw are designed to recover operational costs associated with inspections and sampling, there is no profit to MV.
74	Grease interceptor specifications	Municipal Meeting (Nov 13, 2019)	Questions have been raised about whether grease interceptors are fireproof.	If a building’s classification requires non-combustible building materials, a GI that is rated non-combustible is required.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
75	Regulatory requirements	Municipal Meeting (Nov 13, 2019)	Do the proposed bylaw changes apply to new builds and existing construction? This is different from the BC Plumbing Code, which only applies to new construction.	A distinction must be made between plumbing or building codes and the FSGI bylaw. Plumbing and building codes apply to new construction and are not retroactive (i.e. do not apply to pre-existing buildings. The FSGI bylaw is an environmental regulation and applies to all new and existing kitchens. Its purpose is to prevent FOG from entering municipal and regional sewers and doing harm to the sewer system and the environment.

### 3. Phase 3 – Correspondence and Online Survey (2023)

The following considerations were raised in correspondence and via the online stakeholder survey (held February 17 – March 10, 2023) and reflect comments, questions, and issues provided. Similar questions, suggestions, and concerns have been grouped together for response from Metro Vancouver.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Updating definitions of a food sector establishment				
76	Markets and commissary kitchens	Online stakeholder survey (Feb 17 to March 10, 2023)	Support for adding markets and commissary kitchens to the bylaw. All food sector facilities should share the same rules. A good way to protect the sewer system.	Comment noted.
77	Adding more regulations	Online stakeholder survey (Feb 17 to March 10, 2023)	Adding more regulation, even to level the playing field, is worrying. Would prefer to see less regulation in general.	The proposed changes to the definition of FSEs will not add more regulation, but rather expand and clarify the list of FSEs that fall under the definition.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Adding fixtures that must be connected to a grease interceptor				
78	Dishwashers (new builds and converted spaces only)	Online stakeholder survey (Feb 17 to March 10, 2023)	Support for only requiring dishwashers in new builds and spaces newly converted to food services to be connected to a grease interceptor, which will prevent businesses from having to do retro-fits. However, there is a recommendation in CSA B481/ASME A112.14.3 that states: "When the authority having jurisdiction determines a grease interceptor is required to service a dishwasher, it should be a dedicated grease interceptor." Should the bylaw clarify whether Metro Vancouver will be enforcing this, or allowing dishwasher waste to go into the main grease interceptor?	The proposed bylaw revision requires dishwashers in new builds (or newly converted spaces) to connect to a GI, which does not have to be dedicated. If there are municipal requirements requiring a dedicated GI, the more stringent requirements would supersede other requirements.
79	Dishwashers (new builds and converted spaces only)	Online stakeholder survey (Feb 17 to March 10, 2023)	Upgrade, addition, or replacement of old dishwashers within the premises becomes a grey area.	Dishwashers in new builds or spaces newly converted to food service must be connected to a GI. New, upgraded, or replaced dishwashers in existing FSEs will not require connection.
80	Connecting dishwasher to grease interceptor	Online stakeholder survey (Feb 17 to March 10, 2023)	Prohibitively expensive for small businesses.	The proposed changes will only require dishwashers in new builds or newly converted spaces to connect to a GI. However, it is important to note that the bylaw is in place to prevent FOG from entering the sewer system, which can otherwise lead to grease blockages and sewer backups at the FSE.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
81	Efficacy of grease interceptor in high temperature dishwashers	Online stakeholder survey (Feb 17 to March 10, 2023)	Will the high temperature of the dishwasher's wash and rinse water have an effect on the efficacy of the grease interceptor?	While MV has not done a detailed analysis, it is important to note that requiring dishwashers in new builds and converted spaces to connect to GIs was supported by the majority of stakeholders during engagement.
82	Adding more regulations	Online stakeholder survey (Feb 17 to March 10, 2023)	Adding more regulations is not advisable. Too much bureaucracy.	The fixtures that are being added to the "must be connected to a GI" section of the bylaw are intended to protect the environment, sewer system, sewer workers, and the public.
83	Funnel/hub drains	Online stakeholder survey (Feb 17 to March 10, 2023)	Hub drains can be easily converted into a floor drain.	Comment noted.
Removing fixtures that must not be connected to a grease interceptor				
84	Hand sinks	Online stakeholder survey (Feb 17 to March 10, 2023)	Connecting a hand sink to a GI is harmless but totally unnecessary, given the advantages are minimal. Additional cost in retrofitting, serving , inspecting will be ended up contributing to the final product cost.	The bylaw changes would remove the requirement that says that hand sinks must not be connected to grease interceptors. In other words, a business can have a hand sink connected to their grease interceptor – or not. Both situations will be allowed by the proposed bylaw changes, providing greater flexibility to FSEs.
85	Removing unnecessary regulation	Online stakeholder survey (Feb 17 to March 10, 2023)	Support for this change – removing a regulation because it was problematic.	Comment noted.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
86	Hand sinks	Online stakeholder survey (Feb 17 to March 10, 2023)	Grease will be dumped down hand sinks.	Any hand sink used to discharge FOG to sewer must be connected to a GI.
Interceptor selection flexibility				
87	Clear standards	Online stakeholder survey (Feb 17 to March 10, 2023)	<p>The proposed change doesn't help to clarify or define the standard. Instead, it gives the power to Sewage Control Managers to give more red tape to businesses. Businesses need a clear black and white standard so that we can easily understand our responsibility, not an arbitrary standard which can change from manager to manager.</p> <p>There should be established options that comply with the Sewage Control Manager requirements, so individual case-by-case approvals do not need to be submitted.</p>	MV's preference is that all FSEs install GIs that conform to the prescribed standards in the bylaw (e.g. CSA, etc.). We do not anticipate a significant amount of individual case-by-case approvals.
88	Sizing	Online stakeholder survey (Feb 17 to March 10, 2023)	GI sizing requirements are typically oversized and challenging for small locations. Space is at a premium and it can be challenging to install interceptors to current standards.	In response to feedback received during this engagement, MV reviewed and revised the GI sizing methodology in March 2021. It uses 75 per cent of sink volume (instead of 100 per cent previously) for sizing GIs and should result in smaller grease interceptors.
89	Standard integration	Online stakeholder survey (Feb 17 to March 10, 2023)	CSA B481 has been harmonized with ASME A112.14.3 creating a standard that is recognized on both sides of the border. Code integration is currently being worked on so this could be something for MV to consider.	The proposed bylaw changes allow for either CSA B481, ASME A112.14.3 or the harmonized standard.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
90	Removing unnecessary regulation	Online stakeholder survey (Feb 17 to March 10, 2023)	Support for this change, thinking of businesses, and not unnecessary regulation.	Comment noted.
Increasing fees				
91	Re-inspection and sampling fees	Online stakeholder survey (Feb 17 to March 10, 2023)	What is the breakdown of the proposed increase in the re-inspection and sampling fees? How do you justify the increase?	The fees, which have not been updated since 2012, only apply to non-compliant FSEs which require re-inspection and sampling. The increase in fees is meant to recover operational costs associated with inspections and sampling. Operational costs include-inspection, preparing inspection reports, vehicle mileage and gas, laboratory analyses, etc. There is no profit to MV as a result of the increase.
92	Re-inspection and sampling fees	Online stakeholder survey (Feb 17 to March 10, 2023)	More information about why fee increases will be put in to place will be helpful. What's changed since 2012 that the costs to conduct inspection have nearly doubled?	Fees only apply to non-compliant FSEs which require re-inspection and sampling. The original amount did not reflect the actual costs associated with inspections and sampling. The increase in fees is meant to recover operational costs. Operational costs include-inspection, preparing inspection reports, vehicle mileage and gas, laboratory analyses, etc. There is no profit to MV as a result of the increase.
93	Re-inspection and sampling fees	Online stakeholder survey (Feb 17 to March 10, 2023)	The current fee is sufficient. Higher fees should be applied to repeat offenders who violate the bylaw more than once. First timers should be given a chance to correct an issue instead of penalizing them.	The fees are not meant to be a penalty, they are meant to recover the actual costs of re-inspection or sampling.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
94	Re-inspection and sampling fees	Online stakeholder survey (Feb 17 to March 10, 2023)	Fees are prohibitively expensive for small businesses.	The fees, which have not been updated since 2012, only apply to non-compliant FSEs which require re-inspection and sampling. The increase in fees is meant to recover operational costs associated with inspections and sampling. Operational costs include-inspection, preparing inspection reports, vehicle mileage and gas, laboratory analyses, etc. There is no profit to MV as a result of the increase.
95	Re-inspection and sampling fees	Online stakeholder survey (Feb 17 to March 10, 2023)	Fees are too high. There shouldn't be any fees associated with this.	The fees are meant to recover the costs of re-inspection and sampling. There is no profit to MV.
96	Re-inspection and sampling fees	Online stakeholder survey (Feb 17 to March 10, 2023)	It is still difficult to operate a food service establishment after the very tough years during the COVID-19 pandemic and the current economic climate. Any increase in fees is very hard for a business to absorb. Increases of 40 or 50 per cent are very steep.	<p>Metro Vancouver understands how challenging the last few years have been for the hospitality industry. For that reason, we put the FSGI bylaw review on hold for over two years, to allow food sector establishments to focus on day-to-day business during a difficult time. Ultimately, the bylaw is in place to protect the environment, sewer system, sewer workers, and the public, and must be observed.</p> <p>The fees only apply to non-compliant FSEs that require re-inspection and sampling.</p>



#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Cost				
97	Cost and Canada Emergency Business Account (CEBA) loan	Online stakeholder survey (Feb 17 to March 10, 2023)	<p>The timing of this proposed changes couldn't come at a worse time. Businesses are just coming out of tough times because of the pandemic and have to start paying off CEBA loans starting next year.</p> <p>The cost of this will break a lot of businesses.</p>	<p>Metro Vancouver understands how challenging the last few years have been for the hospitality industry. For that reason, we put the FSGI bylaw review on hold for over two years, to allow food sector establishments to focus on day-to-day business during a difficult time.</p> <p>Ultimately, the bylaw is in place to protect the environment, sewer system, sewer workers, and the public, and must be observed.</p> <p>To support the food service industry, FSEs may submit a compliance plan to Metro Vancouver for consideration, allowing them more time to come into compliance with the bylaw. The plan will need to include details on proposed modifications and an implementation schedule.</p> <p>The proposed bylaw changes removing mop sinks and floor drains from having to be connected to a GI should help lower the cost of installation as the GI can likely be installed under the sink (rather than recessed to the floor).</p> <p>It's also important to note that having a properly-sized GI installed helps protect businesses against grease blockages and sewage backups, which can result in costly plumbing repairs and renovations.</p>

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
98	Cost and Canada Emergency Business Account (CEBA) loan	Online stakeholder survey (Feb 17 to March 10, 2023)	<p>As a restaurant owner, the pandemic had a tremendous effect on our business. We were able to get approved for a CEBA loan, which is the only reason we are still open now. Now that operationally things have started to come back to normal, we were making plans to start paying off our loan starting in 2024.</p> <p>Then the inspector told us to install the grease interceptor. We called a plumber and they quoted us the pricing. This will cost us a substantial amount of money. Money that we currently do not have. To be honest, the cost of installing grease interceptors is something that can break our business and it might finally force us to close down.</p> <p>We built our restaurant in 2007, and it was not required for us to install a grease interceptor. We don't deep fry any of our foods in our location. We bake all of our foods. We don't serve any milk products that could go down the drain. Any food scraps are thrown away into the organics bin. All of our sinks have strainers so nothing is flushed down the sink.</p> <p>We have nothing against protecting the environment, but we are just small guys that don't create enough grease to matter. We think a look into each establishment's day-to-day activity is needed to decide whether a grease interceptor is necessary. Rather than demanding all establishments to install them.</p>	<p>Metro Vancouver understands how challenging the last few years have been for the hospitality industry. For that reason, we put the FSGI bylaw review on hold for over two years, to allow food sector establishments to focus on day-to-day business during a difficult time.</p> <p>However, no form of retroactivity or exemptions can be considered, as the bylaw is in place to protect the environment, sewer system, sewer workers, and the public. The requirement that all FSEs have a properly-sized GI installed has been in place since 2012 – that requirement is not new.</p> <p>To support the food service industry, food sector establishments may submit a compliance plan to Metro Vancouver for consideration, allowing them more time to come into compliance with the bylaw. The plan will need to include details on proposed modifications and an implementation schedule.</p> <p>During a previous bylaw review, Metro Vancouver staff considered production-based grease interceptor sizing (e.g. basing GI sizing on how much grease a particular business generates); however, that type of classification posed challenges for monitoring and enforcement as FSEs experience high turnover. Changes to existing businesses may increase or decrease their levels of FOG output.</p>

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Grease interceptor maintenance				
99	Maintenance	Online stakeholder survey (Feb 17 to March 10, 2023)	The bylaw requires that grease traps are cleaned every three months. This is too often for a small business and thus the cost is too high.	An FSE can contact MV's Environmental Regulation & Enforcement Division if they would like to propose an alternative maintenance schedule. The FSE would have to provide evidence that all other bylaw requirements are met with an alternative schedule.
Grease interceptor location				
100	Location of grease interceptor	Online stakeholder survey (Feb 17 to March 10, 2023)	The code should be changed to allow GIs to be installed outside if possible.	Neither the current nor proposed bylaws have requirements around location of the grease interceptor – GIs can be installed outside.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Implications of COVID-19				
101	Cost of compliance	Email (February 2023)	Business owners have been through COVID-19, tax increases, food inflation and labour issues. Some have lasted, many have failed. Do not change anything with grease interceptors.	<p>Metro Vancouver understands how challenging the last few years have been for the hospitality industry. For that reason, we put the FSGI bylaw review on hold for over two years, to allow food sector establishments to focus on day-to-day business during a difficult time.</p> <p>The requirement that all FSEs have a properly-sized GI installed has been in place since 2012 – that requirement is not new.</p> <p>To support the food service industry, food sector establishments may submit a compliance plan to Metro Vancouver for consideration, allowing them more time to come into compliance with the bylaw. The plan will need to include details on proposed modifications and an implementation schedule.</p>
Fixtures				
102	Hand sinks	Email (April 2023)	Hand sinks will have a minimal impact on the size/load into a grease interceptor, and should not be required to connect. This will make the plumbing system less costly and easier to install if a separate line to the hand sink is not required.	The bylaw changes would remove the requirement that says that hand sinks must not be connected to grease interceptors. In other words, a business can have a hand sink connected to their grease interceptor – or not. Both situations will be allowed by the proposed bylaw changes.

#	Category	Source	Comment/Question/Issue	Metro Vancouver Response
Composition of grease interceptors				
103	Type of material	Letter (April 2023)	Recommend that Metro Vancouver consider encouraging the use of plastic grease interceptors, versus steel. Steel grease traps are cheaper, but they rust. On plastic grease interceptors, often the gaskets are installed in the lid; on steel grease interceptors, often the gasket comes off easily. On steel grease interceptors, bolts get rusty and then the lid can't be closed tightly, which can cause odours and overflows. All of this can mean that the business owner has to replace their steel grease trap, which will then go to the landfill.	GI material requirements go beyond the jurisdiction of the FSGI bylaw. Factors such as fire safety need to be considered when it comes to construction materials, and other regulations such as the BC Building Code, Plumbing Code and municipal regulations would need to be taken into consideration.
Location of grease interceptors				
104	Location for grease interceptor installation	Letter (April 2023)	The best place to install a grease interceptor is by the sink in the kitchen, with access to hot water for maintenance contractors to remove grease build-up when cleaning the interceptor. In some businesses, the grease trap is installed in the basement of the building or in underground parking. This makes access challenging.	The proposed bylaw change removes the requirement for mop sinks and floor drains to be connected to a GI; this will likely result in fewer GIs installed in the basement of a building or in underground parking.

## ATTACHMENT 4



Restaurant kitchen

# Food Sector Grease Interceptor Bylaw

## PROPOSED BYLAW

**Dana Zheng**

Program Manager, Liquid Waste Services

Liquid Waste Committee - September 13, 2023  
61473442

**Jacqueline Liu-Pope**

Senior Project Engineer, Liquid Waste Services

**metro**vancouver



FOG build up

## FATS, OILS, AND GREASE

Fats, oils, and grease (FOG) build-up

- Increases maintenance costs, reduces flow capacity
- \$2.7 million in annual costs to address

Food Sector Grease Interceptor (FSGI) Bylaw

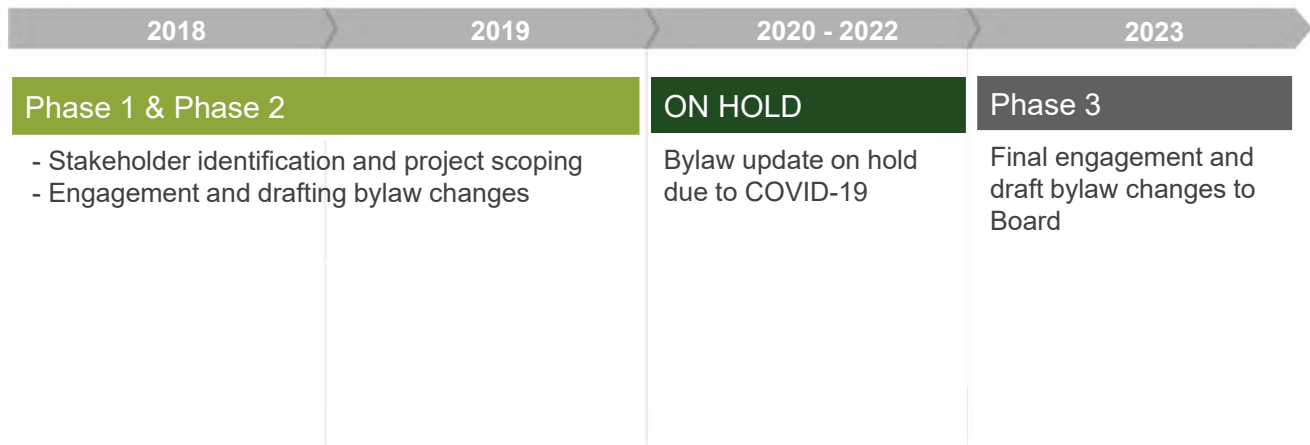
- Regulates discharge from food sector establishments
- Sets requirements for grease interceptors

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## FSGI BYLAW REVIEW TIMELINE

Liquid Waste Committee approved bylaw review in 2018



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## WHAT WE HEARD

Engagement feedback

- Concern about installation and upgrade costs
- Desire for more bylaw flexibility
- Requests for exemptions



Working Group Meeting, 2019

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## BYLAW UPDATES

- Improve flexibility and bylaw clarity
- Reduce costly plumbing retrofits
- Motivate food sector establishments to follow bylaw, resulting in fewer FOG issues



Restaurant patio in Port Moody

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## PROPOSED BYLAW CHANGES

1. Expand the definition of food sector establishments
2. Update list of fixtures required to be connected to a grease interceptor
3. More guidance and options for selecting grease interceptors
4. Update re-inspection and sampling fees for cost recovery



Commissary kitchen

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**COMMITTEE INFORMATION ITEMS AND DELEGATION SUMMARIES**

Greater Vancouver Sewerage and Drainage District  
Board Meeting Date – Friday, September 29, 2023

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This information item, listing recent information received by committee, is provided for the GVS&DD Board's information. Please access a complete PDF package [here](#).

**Liquid Waste Committee – September 13, 2023***Delegations:*

No delegations presented

*Information Items:*

- 5.2 2022 GVS&DD Environmental Management & Quality Control Annual Report
- 5.3 2023 Unflushables Campaign Results
- 5.5 Liquid Waste Services Capital Program Expenditure Update as at June 30, 2023

**Zero Waste Committee – September 14, 2023***Delegation Summaries:*

No delegations presented

*Information Items:*

- 5.1 Summary of Municipal Waste Collection Service Models
- 5.2 Waste-to-Energy Facility Environmental Monitoring and Reporting 2022 Update
- 5.3 Solid Waste Services Capital Program Expenditure Update as of June 30, 2023

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