

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

**REGULAR BOARD MEETING**

**Friday, September 23, 2022**

**9:15 A.M.**

**Meeting conducted electronically pursuant to the Procedure Bylaw  
28<sup>th</sup> Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia**

**Webstream available at <http://www.metrovanancouver.org>**

[Membership and Votes](#)

**REVISED AGENDA<sup>1</sup>**

**A. ADOPTION OF THE AGENDA**

**1. September 23, 2022 Regular Meeting Agenda**

That the GVS&DD Board adopt the agenda for its regular meeting scheduled for September 23, 2022 as circulated.

**B. ADOPTION OF THE MINUTES**

**1. July 29, 2022 Regular Meeting Minutes**

That the GVS&DD Board adopt the minutes for its regular meeting held July 29, 2022 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.*

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

## 1. FINANCE COMMITTEE REPORTS

### 1.1 GVS&DD and GVWD Request for Bylaw Notice Authority

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That the GVS&DD Board direct staff to work with the Ministry of the Attorney General to request that the Lieutenant Governor in Council of the Province of British Columbia enact a Regulation under Section 29 of the *Local Government Bylaw Notice Enforcement Act*, applying the Act to the Greater Vancouver Sewerage and Drainage District.

## F. ITEMS REMOVED FROM THE CONSENT AGENDA

## G. REPORTS NOT INCLUDED IN CONSENT AGENDA

### 1. LIQUID WASTE COMMITTEE REPORTS

*Note: The following item will be considered by the Liquid Waste Committee on September 21, 2022. Any resulting changes to recommendations will be presented on table.*

### 1.1 Sewage and Waste Heat Recovery Bylaw No. 357, 2022

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*[Recommendation a) and b): simple weighted majority vote.] and  
[Recommendation c): 2/3 weighted majority vote.]*

That the GVS&DD Board:

- a) approve the proposed *Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022*, as presented in the report dated September 7, 2022, titled "Sewage and Waste Heat Recovery Bylaw No. 357, 2022";
- b) give first, second and third reading to *Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022*; and
- c) pass and finally adopt *Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022*.

## 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 regular meeting scheduled for September 23, 2022 pursuant to the *Community Charter* provisions, Section 90 (1) (e), (g) and (i) as follows:

"90 (1) A part of a board 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 board or committee considers that disclosure could reasonably be expected to harm the interests of the regional district;

**Added** (g) litigation or potential litigation affecting the regional district; and  
(i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose."

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

**M. ADJOURNMENT/CONCLUSION**

That the GVS&DD Board adjourn/conclude its regular meeting of September 23, 2022.

**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 10:54 a.m. on Friday, July 29, 2022 in the 28<sup>th</sup> Floor Boardroom, 4515 Central Boulevard, Burnaby, British Columbia.

**MEMBERS PRESENT:**

Burnaby, Chair, Director Sav Dhaliwal  
North Vancouver City, Vice Chair Director  
Linda Buchanan\*  
Anmore, Director John McEwen\*  
Burnaby, Director Pietro Calendino\*  
Burnaby, Director Mike Hurley\*  
Coquitlam, Director Craig Hodge\*  
Coquitlam, Director Richard Stewart  
Delta, Director George Harvie\*  
Delta, Director Jeannie Kanakos\*  
Electoral Area A, Director Jen McCutcheon\*  
Langley City, Director Gayle Martin\*  
Langley Township, Director Jack Froese\*  
Langley Township, Director Kim Richter\*  
Maple Ridge, Director Mike Morden\*  
New Westminster, Director Jonathan Côté\*  
North Vancouver District, Director Lisa Muri\*  
Pitt Meadows, Director Bill Dingwall\*  
Port Moody, Director Rob Vagramov\*

Richmond, Director Malcolm Brodie\*  
Richmond, Director Harold Steves\*  
Surrey, Director Linda Annis\*  
Surrey, Director Doug Elford\*  
Surrey, Director Laurie Guerra\*  
Surrey, Director Doug McCallum\*  
Surrey, Director Allison Patton\*  
Vancouver, Director Christine Boyle\*  
Vancouver, Director Adriane Carr\*  
Vancouver, Director Melissa De Genova\*  
Vancouver, Director Lisa Dominato  
Vancouver, Alternate Director Pete Fry\* for  
Kennedy Stewart  
Vancouver, Director Colleen Hardwick\*  
Vancouver, Director Michael Wiebe  
West Vancouver, Director Mary-Ann Booth\*  
White Rock, Director Darryl Walker\*  
Commissioner Jerry W. Dobrovolsky  
(Non-voting member)

**MEMBERS ABSENT:**

Port Coquitlam, Director Brad West  
Surrey, Director Mandeep Nagra

**STAFF PRESENT:**

Chris Plagnol, Corporate Officer  
Natalia Melnikov, 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 29, 2022 Regular Meeting Agenda**

**It was MOVED and SECONDED**

That the GVS&DD Board adopt the agenda for its regular meeting scheduled for July 29, 2022 as circulated.

**CARRIED**

**B. ADOPTION OF THE MINUTES**

**1. June 24, 2022 Regular Meeting Minutes**

**It was MOVED and SECONDED**

That the GVS&DD Board adopt the minutes for its regular meeting held June 24, 2022 as circulated.

**CARRIED**

**2. July 7, 2022 Regular Joint Board Meeting Minutes**

**It was MOVED and SECONDED**

That the GVS&DD Board adopt the minutes for the regular joint meeting of the MVRD, MVHC, GVWD and GVS&DD Boards held July 7, 2022 as circulated.

**CARRIED**

**C. DELEGATIONS**

No items presented.

**D. INVITED PRESENTATIONS**

No items presented.

**E. CONSENT AGENDA**

**It was MOVED and SECONDED**

That the GVS&DD Board adopt the recommendations presented in the following items as presented in the July 29, 2022 GVS&DD Board Consent Agenda:

- 1.1 Sewage and Waste Heat Recovery Policy
- 1.2 Proposed Capital Investment for the Surrey City Energy Sewer Heat Recovery Project
- 1.3 Award of a Contract Resulting from Request for Proposal No. 22-006: Construction of Gilbert Trunk Sewer No.2 Gilbert Road South Section

**CARRIED**

The items and recommendations referred to above are as follows:

**1.1 Sewage and Waste Heat Recovery Policy**

Report dated July 5, 2022, from Jeff Carmichael, Division Manager, Business Development, Liquid Waste Services, and Sarah Wellman, Senior Engineer, Solid Waste Operations, Solid Waste Services, presenting a proposed *Sewage and Waste Heat Recover Policy* for the GVS&DD Board consideration.

*Recommendation:*

That the GVS&DD Board approve the proposed *Sewage and Waste Heat Recovery Policy*, as presented in the report dated July 5, 2022, titled “Sewage and Waste Heat Recovery Policy”.

*Adopted on Consent*

**1.2 Proposed Capital Investment for the Surrey City Energy Sewer Heat Recovery Project**

Report dated June 28, 2022, from Jeff Carmichael, Division Manager, Business Development, Liquid Waste Services, seeking the GVS&DD Board’s recommendation to direct staff to negotiate a contract with the City of Surrey for the Surrey City Centre Sewer Heat Recovery project, which will recover heat from the GVS&DD North Surrey Interceptor and make it available to the City of Surrey’s District energy system, and authorizing expenditures up to \$19 million as endorsed in the 2022 to 2026 capital plan.

*Recommendation:*

That the GVS&DD Board:

- a) direct staff to enter into contract negotiations with the City of Surrey for the Surrey City Centre Sewer Heat Recovery project, as presented in the report dated June 28, 2022, titled “Proposed Capital Investment for the Surrey City Centre Sewer Heat Recovery Project”; and
- b) authorize expenditures up to \$19 million as endorsed in the 2022 to 2026 capital plan.

*Adopted on Consent*

**1.3 Award of a Contract Resulting from Request for Proposal No. 22-006: Construction of Gilbert Trunk Sewer No.2 Gilbert Road South Section**

Report dated June 28, 2022, from Roy Moulder, Director Procurement, Procurement and Real Estate Services, and Joan Liu, Division Manager, Collection Systems, Engineering Design and Construction, Liquid Waste Services, advising the GVS&DD Board of the results of Request for Proposal (RFP) No. 22-006: Gilbert Trunk Sewer No.2 Gilbert Road South Section and recommending award of the contract in the amount of up to \$39,856,650 (exclusive of taxes) to Jacob Brothers Construction Inc. (Jacob Brothers).

*Recommendation:*

That the GVS&DD Board:

- a) approve award of a contract in the amount of up to \$39,856,650 (exclusive of taxes) to Jacob Brothers Construction Inc., resulting from Request for Proposal No. 22-006: Construction of Gilbert Trunk Sewer No.2 Gilbert Road South Section, 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 award should proceed.

*Adopted on Consent*

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

No items presented.

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

**1.1 GVS&DD Temporary Borrowing Bylaw No. 358, 2022**

Report dated June 27, 2022, from Linda Sabatini, Acting Director, Financial Operations, seeking the GVS&DD Board's approval for temporary borrowing through the Metro Vancouver Regional District and the Municipal Finance Authority of British Columbia, for the anticipated capital infrastructure activities, for an amount, or amounts in the aggregate, not exceeding \$1.42 billion dollars, the remaining amount of the Greater Vancouver Sewerage & Drainage District Borrowing Bylaw No. 321, 2018, and the maximum borrowing authorized.

**It was MOVED and SECONDED**

That the GVS&DD Board:

- a) authorize Metro Vancouver Regional District ("MVRD") to temporary borrow on behalf of GVS&DD an amount, or amounts in aggregate, not exceeding \$1.42 billion dollars, the remaining amount of the *Greater Vancouver Sewerage & Drainage District Borrowing Bylaw No. 321, 2018*, and the maximum borrowing authorized; and
- b) give first, second and third readings to "*Greater Vancouver Sewerage & Drainage District Temporary Borrowing Bylaw Number 358, 2022*" and forward to the Inspector of Municipalities for statutory approval.

**CARRIED**

Director Richter voted in the negative.

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

No items presented.

**I. OTHER BUSINESS**

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

**It was MOVED and SECONDED**

That the GVS&DD Board receive for information the GVS&DD Board Committee Information Items and Delegation Summaries, dated July 29, 2022.

**CARRIED**

**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 regular meeting scheduled for July 29, 2022 pursuant to the *Community Charter* provisions, Section 90 (1) (g) and (j) as follows:

“90 (1) A part of the 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 regional district; and

(j) information that is prohibited, or information that if it were presented in a document would be prohibited, from disclosure under section 21 of the *Freedom of Information and Protection of Privacy Act.*”

**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 regular meeting of July 29, 2022.

**CARRIED**

(Time: 10:56 a.m.)

CERTIFIED CORRECT

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Chris Plagnol, Corporate Officer

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Sav Dhaliwal, Chair

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To: Finance Committee

From: Jerry W. Dobrovolny, Commissioner/Chief Administrative Officer

Date: September 6, 2022

Meeting Date: September 8, 2022

Subject: **GVS&DD and GVWD Request for Bylaw Notice Authority**

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### **RECOMMENDATION**

That the GVS&DD Board direct staff to work with the Ministry of the Attorney General to request that the Lieutenant Governor in Council of the Province of British Columbia enact a Regulation under Section 29 of the *Local Government Bylaw Notice Enforcement Act*, applying the Act to the Greater Vancouver Sewerage and Drainage District.

That the GVWD Board direct staff to work with the Ministry of the Attorney General to request that the Lieutenant Governor in Council of the Province of British Columbia enact a Regulation under Section 29 of the *Local Government Bylaw Notice Enforcement Act*, applying the Act to the Greater Vancouver Water District.

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### **EXECUTIVE SUMMARY**

The Greater Vancouver Sewerage and Drainage District (GVS&DD) and Greater Vancouver Water District (GVWD) have neither Bylaw Notice nor Municipal Ticketing authority. Bylaw Notice authority would assist GVS&DD and GVWD in encouraging compliance with Liquid Waste, Water, and Solid Waste bylaws. Bylaw Notice authority is available to municipalities and regional districts across the province including almost all of Metro Vancouver's member municipalities. Board resolutions are required for provincial consideration of the GVS&DD and GVWD requests for Bylaw Notice authority. The availability of effective bylaw enforcement tools has significant financial implications across all three utilities both for enforcement efficiency and also for the protection of Metro Vancouver assets.

If Bylaw Notice authority is provided to GVS&DD and GVWD, where appropriate, staff would undertake public, stakeholder and First Nations engagement as part of developing Bylaw Notice bylaws for the Boards' consideration. To ensure a consistent approach, as part of the process to establish the bylaws, the implementation of a Bylaw Notice financial policy would be investigated.

### **PURPOSE**

This report seeks GVS&DD and GVWD Board direction for staff to work with Ministry of Attorney General staff to request Bylaw Notice authority.

### **BACKGROUND**

GVS&DD and GVWD have neither Bylaw Notice nor Municipal Ticketing authority. Both of these tools are available to municipalities and regional districts across the province. Metro Vancouver has written the Province on various occasions requesting this authority for GVS&DD, and more recently for GVWD as well. Both Municipal Ticketing and Bylaw Notice are available for enforcement of MVRD services such as parks and air quality. A board resolution is required for consideration of the request for Bylaw

Notice authority. This report recommends the GVWD and GVS&DD Boards direct staff to work with Ministry of Attorney General staff to request that GVS&DD and GVWD be provided Bylaw Notice authority.

### **BYLAW NOTICE AUTHORITY**

Under the *Local Government Bylaw Notice Enforcement Act*, local governments can be provided Bylaw Notice authority. Authorized local governments are included in the *Bylaw Notice Enforcement Regulation* through a list of prescribed bodies in a schedule to the regulation. The *Bylaw Notice Enforcement Regulation* is updated on a regular basis with the addition of local government entities. As of now, 19 of Metro Vancouver's 21 municipal members are listed in the *Bylaw Notice Enforcement Regulation*.

Under the *Local Government Bylaw Notice Enforcement Act*, prescribed bodies enact bylaws that specify penalties up to \$500 per bylaw contravention.

### **GVS&DD and GVWD Application of Bylaw Notice Authority**

Bylaw Notice authority would assist GVS&DD in enforcing existing GVS&DD Bylaws including the *Sewer Use Bylaw No. 299, 2007*; *Food Sector Grease Interceptor Bylaw 268, 2012*; *Fermentation Operations Bylaw 294, 2015*; *Trucked Liquid Waste Bylaw 345, 2021*; *Sani-dump Bylaw 346, 2021*; and *Hospital Pollution Prevention Bylaw 319, 2018*; along with solid waste bylaws such as *Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996*, and the *Tipping Fee and Solid Waste Disposal Regulation Bylaw No. 306, 2017 as amended*. Currently Metro Vancouver's only enforcement option for these bylaws is through the courts.

GVWD would similarly benefit from Bylaw Notice authority, particularly related to protecting Metro Vancouver's Water Supply Areas from activities such as unauthorized entry, failing to follow conditions of authorized entry, starting fires and damaging the environment. Restricting public access to the Water Supply Areas is a fundamental component of Metro Vancouver's multi-barrier protection approach and the *Drinking Water Management Plan*. Bylaw Notice authority would also permit enforcement in relation to public conduct in the Lower Seymour Conservation Reserve impacting fire prevention, public safety and the prevention of damage to the environment. GVWD staff are preparing a Bylaw for future Board consideration to support existing policies and enhance enforcement action in these important areas.

### **Municipal Ticketing Authority**

An additional regulatory tool available to local governments around the province is Municipal Ticketing Authority. A key differences between Municipal Ticketing authority and Bylaw Notice authority is that a Municipal Ticket alleges an offence, whereas a Bylaw Notice alleges a bylaw violation and engages an administrative adjudication process only, if challenged. In contrast, if a Municipal Ticket is challenged, the matter is adjudicated in the Provincial Court. Municipal Tickets allow for fines of up to \$1,000 per offence, as compared to a Bylaw Notice's maximum penalty of \$500 per bylaw violation.

Over the long term, the addition of Municipal Ticketing authority for GVWD and GVS&DD would be useful. Legislative updates to the GVS&DD and GVWD acts or other provincial acts would be required

to access Municipal Ticketing authority. The Province has provided no indication that legislative updates would be considered at this time.

### **Establishment of Bylaw Violation Enforcement and Dispute Adjudication Bylaws**

If GVS&DD and GVWD are provided Bylaw Notice authority, to implement the authority, bylaw notice enforcement and dispute adjudication bylaws would subsequently be brought forward for consideration by the GVS&DD and GVWD Boards. These bylaw violation enforcement and dispute adjudication bylaws would establish enforcement processes, penalty amounts for specific bylaw violations as well as dispute adjudication processes. MVRD has such a bylaw in place currently for enforcement of parks and air quality bylaws. Where appropriate, public, stakeholder and First Nations engagement on the specifics of the bylaw violation enforcement and dispute adjudication bylaws would occur as part of the development of those bylaws.

### **ALTERNATIVES**

1. That the GVS&DD Board direct staff to work with the Ministry of the Attorney General to request that the Lieutenant Governor in Council of the Province of British Columbia enact a Regulation under Section 29 of the *Local Government Bylaw Notice Enforcement Act*, applying the Act to the Greater Vancouver Sewerage and Drainage District.

That the GVWD Board direct staff to work with the Ministry of the Attorney General to request that the Lieutenant Governor in Council of the Province of British Columbia enact a Regulation under Section 29 of the *Local Government Bylaw Notice Enforcement Act*, applying the Act to the Greater Vancouver Water District.

2. That the Finance Committee receive for information the report dated September 6, 2022 titled "GVS&DD and GVWD Request for Bylaw Notice Authority" and provide alternate direction to staff.

### **FINANCIAL IMPLICATIONS**

If the GVS&DD and GVWD Boards approve Alternative 1, staff will work with the Ministry of the Attorney General to request that the Lieutenant Governor in Council of the Province of British Columbia enact a Regulation under Section 29 of the *Local Government Bylaw Notice Enforcement Act*.

Effective enforcement tools are important in each of the Water, Liquid Waste and Solid Waste functions from an enforcement efficiency perspective. The ability to levy financial penalties in an efficient manner encourages bylaw compliance. Effective bylaw enforcement protects Metro Vancouver and municipal infrastructure. The impacts of grease build-up in the region's liquid waste system costs at least \$2.7 million per year including infrastructure maintenance and spill management. The actual revenues from Bylaw Notice penalties are expected to be small given the expectation of high levels of compliance with Metro Vancouver's bylaws.

If Bylaw Notice authority is provided to GVS&DD and GVWD, as part of the process to develop bylaw violation enforcement and dispute adjudication bylaws, the development of a Bylaw Notice financial policy will be investigated. The benefit of an overall organizational policy for these bylaws will be that

a consistent approach for establishing penalties as well as enforcement and adjudication processes can be developed that will help guide the individual bylaw development.

If the GVS&DD and GVWD Boards do not direct staff to work with provincial staff to enact a Regulation under Section 29 of the *Local Government Bylaw Notice Enforcement Act*, GVS&DD and GVWD will not have access to Bylaw Notice authority, an important tool in ensuring compliance with GVS&DD and GVWD bylaws.

## **CONCLUSION**

Bylaw Notice authority is a regulatory tool available to municipalities and regional districts across the province. For GVS&DD and GVWD to be granted Bylaw Notice authority they must be added to the *Bylaw Notice Enforcement Regulation*. Bylaw Notice authority would assist GVS&DD and GVWD in ensuring compliance with Liquid Waste, Water and Solid Waste bylaws. This report seeks direction from the GVS&DD and GVWD Boards for staff to work with provincial staff to seek Bylaw Notice authority.

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To: Liquid Waste Committee

From: Jeff Carmichael, Division Manager, Liquid Waste Services

Date: September 7, 2022 Meeting Date: September 21, 2022

Subject: **Sewage and Waste Heat Recovery Bylaw No. 357, 2022**

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**RECOMMENDATION**

That the GVS&DD Board:

- a) approve the proposed Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022, as presented in the report dated September 7, 2022, titled "Sewage and Waste Heat Recovery Bylaw No. 357, 2022";
  - b) give first, second and third reading to Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022; and
  - c) pass and finally adopt Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022.
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**EXECUTIVE SUMMARY**

On July 29, 2022 the GVS&DD Board approved the *Sewage and Waste Heat Recovery Policy*, which enables and provides guidance for heat recovery projects. Staff recommend that a supporting bylaw be enacted, in order to reinforce GVS&DD's authority in this regard, utilizing all tools allowed under the authority of the *GVS&DD Act*. Metro Vancouver has the opportunity to reduce greenhouse gas emissions by enabling sewer and waste heat recovery projects that provide renewable, fossil fuel-free heat to residents and businesses in the region. There is enough excess heat in the liquid waste collection system to heat 100,000 homes throughout the region, and enough heat available from the Waste-to-Energy Facility to provide for another 30,000 homes. Projects are underway and more projects of this nature are under consideration.

**PURPOSE**

To seek GVS&DD Board approval of a proposed Sewage and Waste Heat Recovery Bylaw No. 357, 2022 to support sewer and waste heat recovery projects.

**BACKGROUND**

The MVRD and GVS&DD Boards have established several policies and frameworks establishing their intent to address climate change and to encourage resource recovery.

The *Integrated Liquid Waste and Resource Management Plan* (Reference 1) identifies the strategic goal to "use waste as a resource". On June 23, 2017, the MVRD Board approved a *Carbon Price Policy* (Reference 2) for Metro Vancouver that established a value for GHG emission reductions of \$150/tonne CO<sub>2</sub>e. On July 26, 2019, the MVRD Board approved the *Climate 2050 Strategic Framework* (Reference 3), which targets 45% reduction in GHG emission by 2030 and a climate neutral region by 2050. The *Sewage and Waste Heat Recovery Policy*, which superseded the *Liquid Waste Heat Recovery Policy* (Reference 4), was approved by GVS&DD Board on July 29, 2022.

Agreements are in place to provide heat recovered from treated sewage at the North Shore Wastewater Treatment Plant to Lonsdale Energy Corporation, and to provide heat recovered from the Waste-to-Energy Facility energy to the River District Energy development. A capital contribution toward the Sapperton District sewer heat project has been authorized by the GVS&DD Board. Several additional sewer heat recovery projects are under development or assessment.

#### **RATIONALE AND SUPPORT FOR BYLAW**

Sewage and waste heat recovery is considered to be within the scope of the *GVS&DD Act* that governs such projects and expenditures. Establishment of a supporting bylaw will reinforce GVS&DD's authority in this regard, utilizing all tools allowed under the authority of the *GVS&DD Act*.

Section 6(1) of the *GVS&DD Act*, the primary provision setting out GVS&DD's statutory purpose, incorporates by express reference a report known as the Rawn Report. The Rawn Report expressly references salvaging and recovering certain utilizable by-products from the treatment of sewage, such as reclaimed water for irrigation, digested sludge for fertilizer, and biogas for combustion as source of heat and power in internal combustion engines. While there is no express reference in the Rawn Report to salvaging heat from sewage for use as a source of heat or power, it does expressly contemplate future advances in technology, and the power to undertake sewer heat recovery projects can be reasonably and fairly implied.

Notwithstanding this, because Section 6(2) of the *GVS&DD Act* expressly contemplates bylaw sanction for any work not included in the Rawn Report, introducing this bylaw would reinforce and clarify GVS&DD's authority to undertake sewer heat recovery projects.

Sewer heat recovery also aligns directly with strategic guidance provided by the *Integrated Liquid Waste and Resource Recovery Plan*, which includes the goal of using liquid waste as a resource.

Section 7A of the *GVS&DD Act* adds the disposal of all types of waste to the objects of GVS&DD and incorporates by express reference a report known as the Bunnell Report. Because this report identifies that it may be possible in the future for state-of-the-art waste disposal incinerators to be financially dependent on revenue generated by energy sales, the power to undertake waste heat recovery projects can be reasonably and fairly implied. Notwithstanding this, because Section 7A(2) of the *GVS&DD Act* expressly contemplates bylaw sanction for any work not included in the Bunnell Report, introducing this bylaw would reinforce and clarify GVS&DD's authority to undertake waste heat recovery projects.

Waste heat recovery also aligns directly with strategic guidance provided by the *Integrated Solid Waste and Resource Management Plan*, which includes the goal of recovering energy from the waste stream after material recycling.

## **ALTERNATIVES**

1. That the GVS&DD Board:
  - a) approve the proposed Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022, as presented in the report dated September 7, 2022, titled "Sewage and Waste Heat Recovery Bylaw No. 357, 2022";
  - b) give first, second and third reading to Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022; and
  - c) pass and finally adopt Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022.
2. That the GVS&DD Board receive for information the report dated September 7, 2022 titled "Sewage and Waste Heat Recovery Bylaw No. 357, 2022" and provide alternative direction to staff.

## **FINANCIAL IMPLICATIONS**

There are no direct financial implications of establishing the bylaw. Any and all projects that seek GVS&DD capital investment will continue to be brought to the GVS&DD Board for consideration.

## **CONCLUSION**

Metro Vancouver's *Climate 2050* strategy includes targets for regional GHG reductions of 45% by 2030 compared to 2010 levels, and a carbon neutral region by 2050. Metro Vancouver has the potential and opportunity to reduce GHG emissions through capital funding for projects that recover energy from liquid and solid waste systems for building heat and hot water to offset fossil fuels.

Staff recommend that a supporting bylaw be enacted, in order to reinforce and clarify GVS&DD's authority to undertake sewage and waste heat recovery activities, utilizing all tools allowed under the authority of the *GVS&DD Act*.

Staff recommend Alternative 1.

## **Attachment**

Sewage and Waste Heat Recovery Bylaw No. 357, 2022

## **References**

1. [\*Integrated Liquid Waste and Resource Management Plan\*](#)
2. [\*Carbon Price Policy\*](#)
3. [\*Climate 2050 Strategic Framework\*](#)
4. [\*Liquid Waste Heat Recovery Policy\*](#)

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT  
BYLAW NO. 357, 2022  
A Bylaw to Authorize Heat Recovery from Sewage and Waste**

**WHEREAS:**

- A. Pursuant to the *Greater Vancouver Sewerage and Drainage District Act* (the “**Act**”) the objects of the Greater Vancouver Sewerage and Drainage District (the “**Corporation**”) include the construction, maintenance, operation, and administration of major sewerage and drainage facilities, and facilities for the disposal of all types of waste;
- B. Pursuant to the Corporation’s approved *Integrated Liquid Waste and Resource Management Plan* and *Integrated Solid Waste and Resource Management Plan*, the Corporation seeks to recover heat energy as a resource from sewage and waste;
- C. The reports referred to in Section 6(1) and Section 7A(1) of the Act (known generally as the Rawn Report and Bunnell Report, respectively) include recovery of some utilizable by-products from the treatment of sewage and waste disposal, but do not expressly include heat recovery from sewage and waste;
- D. The Act empowers the Corporation to perform work requisite to its function but not included in the reports referred to in Section 6(1) and Section 7A(1) of the Act, but only with the sanction of a bylaw of the Board of the Corporation (the “**Board**”) passed by a majority of not less than 2/3 of the votes cast; and
- E. The Board wishes to authorize the Corporation to perform sewage and waste heat recovery work.

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

**Citation**

- 1. The official citation of this bylaw is “Greater Vancouver Sewerage and Drainage District Sewage and Waste Heat Recovery Bylaw No. 357, 2022”.

**Definitions and Interpretation**

- 2. In this bylaw:

“**Act**” means *Greater Vancouver Sewerage and Drainage District Act*, SBC 1956, c 59;

“**Board**” means the Administration Board of the Corporation;

“**Corporation**” means Greater Vancouver Sewerage and Drainage District;

“**Facilities**” has the meaning given in the Act; and

“waste” has the meaning given in the Act.

#### Heat Recovery from Sewage and Waste

3. The Corporation is hereby authorized to recover heat energy from sewage and waste in the Facilities, and to undertake the construction, maintenance, operation, and administration of facilities for the recovery, generation, storage, transmission and distribution of heat energy from sewage and waste, subject to the limitations set out in the *Procurement and Real Property Contracting Authority Policy* adopted by the Board and as may be amended or replaced from time to time.

#### Severance

4. If any provision of this bylaw is for any reason whatsoever held to be invalid in whole or in part by a decision of a court of competent jurisdiction, the remainder of this bylaw or the remainder of a provision determined to be invalid in part shall remain in full force and effect and its validity shall not be affected by the decision.

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

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

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Sav Dhaliwal, Chair

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Chris Plagnol, Corporate Officer

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**COMMITTEE INFORMATION ITEMS AND DELEGATION SUMMARIES**

Greater Vancouver Sewerage and Drainage District  
Board Meeting Date – Friday, September 23, 2022

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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](#).

**Zero Waste Committee – September 9, 2022***Delegation Summaries:*

No delegations presented

*Information Items:*

- 5.1 Innovation and Continuous Improvement
- 5.2 2021 Integrated Solid Waste & Resource Management Plan Biennial Report Feedback
- 5.3 Waste-to-Energy Facility Environmental Monitoring and Reporting 2021 Update
- 5.4 Illegal Dumping and Gypsum Management Update

**Liquid Waste Committee – September 21, 2022**

*Note: The following items will be considered by the Liquid Waste Committee on September 21, 2022. Any resulting changes to recommendations will be presented on table.*

*Delegation Summaries:*

No delegations presented

*Information Items:*

- 5.2 2022 Unflushables Campaign Results

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