

**METRO VANCOUVER REGIONAL DISTRICT
LIQUID WASTE COMMITTEE**

REGULAR MEETING

November 14, 2019

1:00 p.m.

28th Floor Committee Room, 4730 Kingsway, Burnaby, British Columbia

A G E N D A¹

1. ADOPTION OF THE AGENDA

1.1 November 14, 2019 Regular Meeting Agenda

That the Liquid Waste Committee adopt the agenda for its regular meeting scheduled for November 14, 2019 as circulated.

2. ADOPTION OF THE MINUTES

2.1 October 17, 2019 Regular Meeting Minutes

That the Liquid Waste Committee adopt the minutes of its regular meeting held October 17, 2019 as circulated.

3. DELEGATIONS

4. INVITED PRESENTATIONS

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Direct Connections to Regional Liquid Waste Facilities Policy

Designated Speaker: Brent Burton, Division Manager, Policy, Planning and Analysis, Liquid Waste Services

That the GVS&DD Board approve the *Direct Connections to Regional Liquid Waste Facilities Policy* as presented in the report dated November 8, 2019, titled "Direct Connections to Regional Liquid Waste Facilities Policy".

5.2 2019 Regional Unflushables Campaign Results

Designated Speaker: Larina Lopez, Division Manager, Corporate Communications, External Relations

That the Liquid Waste Committee receive for information the report dated November 1, 2019, titled "2019 Regional Unflushables Campaign Results".

¹ Note: Recommendation is shown under each item, where applicable.

5.3 Public Notification of Sewer Overflows and Wastewater Treatment Plant Process Interruptions

Designated Speaker: Tom Sadleir, Program Manager, Community Engagement, Liquid Waste Services

That the GVS&DD Board approve the scope of the public notification program for sewer overflows and wastewater treatment plant process interruptions and authorize staff to proceed with the engagement process as presented in the report dated November 8, 2019, titled "Public Notification of Sewer Overflows and Wastewater Treatment Plant Process Interruptions".

5.4 Integrated Liquid Waste and Resource Management Plan Biennial Report 2017-2018 - Engagement Results

Designated Speaker: Tom Sadleir, Program Manager, Community Engagement, Liquid Waste Services

That the Liquid Waste Committee receive for information the report dated October 28, 2019, titled "Integrated Liquid Waste and Resource Management Plan Biennial Report 2017-2018 - Engagement Results".

5.5 Feasibility of a Regional Recreational Vehicle Sanitary Dump Facility

Designated Speaker: Brent Burton, Division Manager, Policy, Planning and Analysis, Liquid Waste Services

That the Liquid Waste Committee receive for information the report dated October 31, 2019, titled "Feasibility of a Regional Recreational Vehicle Sanitary Dump Facility".

5.6 Award of Contract Resulting from Tender No. 19-212: Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank

Designated Speakers: Roy Moulder, Director, Purchasing and Risk Management, Financial Services, and Paul Wilting, Program Manager, Northwest Langley Treatment Projects, Project Delivery, Liquid Waste Services

That the GVS&DD Board:

- a) approve the award of a contract in the amount of \$60,801,000 (exclusive of taxes) to NAC Constructors Ltd. resulting from Tender No. 19-212: Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank; and
- b) authorize the Commissioner and the Corporate Officer to execute the contract.

5.7 Manager's Report

Designated Speaker: Peter Navratil, General Manager, Liquid Waste Services

That the Liquid Waste Committee receive for information the Manager's Report dated October 25, 2019.

6. INFORMATION ITEMS

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. RESOLUTION TO CLOSE MEETING

Note: The Committee 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.

10. ADJOURNMENT/CONCLUSION

That the Liquid Waste Committee adjourn/conclude its regular meeting of November 14, 2019.

Membership:

Stewart, Richard (C) - Coquitlam

Little, Mike (VC) - North Vancouver District

Calendino, Pietro - Burnaby

Dominato, Lisa - Vancouver

Elford, Doug - City of Surrey

Ferguson, Steve - Langley Township

Loo, Alexa - Richmond

Svendsen, Ryan - Maple Ridge

Trentadue, Mary - New Westminster

Vagramov, Rob - Port Moody

van den Broek, Val - Langley City

Walker, Darryl - White Rock

**METRO VANCOUVER REGIONAL DISTRICT
LIQUID WASTE COMMITTEE**

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Liquid Waste Committee held at 1:02 p.m. on Thursday, October 17, 2019 in the 28th Floor Committee Room, 4730 Kingsway, Burnaby, British Columbia.

MEMBERS PRESENT:

Chair, Mayor Richard Stewart, Coquitlam
 Vice Chair, Mayor Mike Little, North Vancouver District
 Councillor Pietro Calendino, Burnaby (departed at 2:44 p.m.)
 Councillor Lisa Dominato, Vancouver
 Councillor Doug Elford, Surrey
 Councillor Steve Ferguson, Langley Township
 Councillor Alexa Loo, Richmond
 Councillor Ryan Svendsen, Maple Ridge
 Councillor Mary Trentadue, New Westminster
 Mayor Val van den Broek, Langley City

MEMBERS ABSENT:

Mayor Rob Vagramov, Port Moody
 Mayor Darryl Walker, White Rock

STAFF PRESENT:

Peter Navratil, General Manager, Liquid Waste Services
 Carol Mason, Chief Administrative Officer
 Genevieve Lanz, Legislative Services Coordinator, Board and Information Services

1. ADOPTION OF THE AGENDA

1.1 October 17, 2019 Regular Meeting Agenda

It was MOVED and SECONDED

That the Liquid Waste Committee adopt the agenda for its regular meeting scheduled for October 17, 2019 as circulated.

CARRIED

2. ADOPTION OF THE MINUTES

2.1 September 19, 2019 Regular Meeting Minutes

It was MOVED and SECONDED

That the Liquid Waste Committee adopt the minutes of its regular meeting held September 19, 2019 as circulated.

CARRIED

3. DELEGATIONS

No items presented.

4. INVITED PRESENTATIONS

No items presented.

5. REPORTS FROM COMMITTEE OR STAFF

5.1 2020 - 2024 Financial Plan – Liquid Waste Services

Report dated October 10, 2019 from Peter Navratil, General Manager, Liquid Waste Services, presenting the 2020-2024 Liquid Waste Services Financial Plan for consideration.

Members were provided with a presentation on the Liquid Waste Services 2020 – 2024 Financial Plan, highlighting service level metrics, revenues and expenditures, capital program, and household impact comparison with other jurisdictions.

In response to questions, members were informed that the use of surpluses and reserves are guided by the *Operating, Statutory and Discretionary Reserves Policy*.

On-table additional information titled “Proposed 2020 Metro Vancouver Position Requests” and presentation material titled “2020 – 2024 Financial Plan – Liquid Waste Services” are retained with the October 16, 2019 Liquid Waste Committee agenda.

It was MOVED and SECONDED

That the Liquid Waste Committee endorse the 2020 - 2024 Financial Plan for Liquid Waste Services as presented in the report dated October 10, 2019, titled “2020 - 2024 Financial Plan – Liquid Waste Services” and forward it to the Greater Vancouver Sewerage and Drainage District Board Budget Workshop on October 23, 2019 for consideration.

CARRIED

5.2 Proposed Amendments to GVS&DD Cost Apportionment Bylaw No. 283, 2014 – Village of Anmore

Report dated October 10, 2019 from Peter Navratil, General Manager, Liquid Waste Services, and Dean Rear, Acting General Manager, Financial Services/Chief Financial Officer, seeking first, second and third reading of *Greater Vancouver Sewerage and Drainage District's Cost Apportionment Amending Bylaw No. 332, 2019*.

It was MOVED and SECONDED

That the GVS&DD Board give first, second and third reading to *Greater Vancouver Sewerage and Drainage District's Cost Apportionment Amending Bylaw No. 332, 2019*.

CARRIED

5.3 Liquid Waste Services Capital Program Expenditure Update as at August 31, 2019

Report dated October 10, 2019 from Bryan Shoji, Director, Project Delivery, Liquid Waste Services, informing members of the status of Liquid Waste Services capital program and financial performance for the period ending August 31, 2019.

Members were provided with a presentation on the Liquid Waste Services capital expenditure progress to August 31, 2019, highlighting project status updates on the Albert Trunk Sewer, Gilbert Trunk Sewer, Sapperton Pump Station, Golden Ears Sanitary Overflow Tank and Annacis Island Wastewater Treatment Plant Secondary Clarifier Rehabilitation.

Presentation material titled "Liquid Waste Services Capital Program Expenditure Update – as at August 31, 2019" is retained with the October 17, 2019 Liquid Waste Committee agenda.

It was MOVED and SECONDED

That the Liquid Waste Committee receive for information the report dated October 10, 2019, titled "Liquid Waste Services Capital Program Expenditure Update as at August 31, 2019".

CARRIED

5.4 Iona Island Wastewater Treatment Plant Project – Community Engagement Process

Report dated October 1, 2019 from Tom Sadleir, Program Manager, Community Engagement, Liquid Waste Services, seeking authorization to complete the community engagement process in support of the Project Definition Phase for the Iona Island Wastewater Treatment Plant.

Members were provided a presentation on the Iona Island Wastewater Treatment Plant project related to Item 5.4 and 5.5, highlighting community engagement activities, public workshop feedback, and update on project definition phase.

Presentation material titled “Iona Island Wastewater Treatment Plant - Community Engagement and Project Definition Phase” is retained with the October 17, 2019 Liquid Waste Committee agenda.

It was MOVED and SECONDED

That the GVS&DD Board authorize staff to complete the community engagement process, as presented in the report dated October 1, 2019, titled “Iona Island Wastewater Treatment Plant Project – Community Engagement Process”.

CARRIED

5.5 Iona Island Secondary Wastewater Treatment Plant Project Definition Update

Report dated September 26, 2019 from Fred Nenninger, Director, Policy, Planning and Analysis, Liquid Waste Services, updating members on the Project Definition Phase for the Iona Island Wastewater Treatment Plant.

2:44 p.m. Councillor Calendino departed the meeting.

It was MOVED and SECONDED

That the Liquid Waste Committee receive for information the report dated September 26, 2019 titled “Iona Island Secondary Wastewater Treatment Plant Project Definition Update”.

CARRIED

Mayor van den Broek absent at the vote.

5.6 GVS&DD’s Sewerage and Drainage Areas Boundaries Amending Bylaw No. 329, 2019 – Fraser Sewerage Area – 7969 Highway 91 Connector, Delta

Report dated October 8, 2019 from Brent Burton, Division Manager, Policy, Planning and Analysis, Liquid Waste Services, seeking GVS&DD Board adoption of *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 329, 2019* to include the MK Delta Lands located in the City of Delta within the Fraser Sewerage Area.

It was MOVED and SECONDED

That the GVS&DD Board:

- a) give first, second and third reading to the *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 329, 2019*; and
- b) pass, and finally adopt *Greater Vancouver Sewerage and Drainage District Sewerage and Drainage Areas Boundaries Amending Bylaw No. 329, 2019*.

CARRIED

Mayor van den Broek absent at the vote.

5.7 Manager's Report

Report dated September 30, 2019 from Peter Navratil, General Manager, Liquid Waste Services, providing members with an update on the 2019 Liquid Waste Committee Work Plan, highlighting Iona Beach Regional Park road update, and attendance at the American Water Works Association and Water Environment Federation Utility Management Conference in 2020.

It was MOVED and SECONDED

That the Liquid Waste Committee receive for information the Manager's Report dated September 30, 2019.

CARRIED

6. INFORMATION ITEMS

It was MOVED and SECONDED

That the Liquid Waste Committee receive for information the following Information Item:

- 6.1 Incoming Correspondence from the Minister of Environment and Climate Change Strategy re: Extension of Comprehensive Review Cycle - GVS&DD Integrated Liquid Waste and Resource Management Plan dated September 11, 2019

CARRIED

7. OTHER BUSINESS

No items presented.

8. BUSINESS ARISING FROM DELEGATIONS

No items presented.

9. RESOLUTION TO CLOSE MEETING

No items presented.

10. ADJOURNMENT/CONCLUSION

It was MOVED and SECONDED

That the Liquid Waste Committee conclude its regular meeting of October 17, 2019.

CARRIED

(Time: 2:53 p.m.)

Genevieve Lanz,
Legislative Services Coordinator

Richard Stewart, Chair

To: Liquid Waste Committee

From: Brent Burton, Division Manager, Policy, Planning and Analysis, Liquid Waste Services

Date: November 8, 2019 Meeting Date: November 14, 2019

Subject: **Direct Connections to Regional Liquid Waste Facilities Policy**

RECOMMENDATION

That the GVS&DD Board approve the *Direct Connections to Regional Liquid Waste Facilities Policy* as presented in the report dated November 8, 2019, titled “Direct Connections to Regional Liquid Waste Facilities Policy”.

PURPOSE

To seek the GVS&DD Board’s approval of the attached policy addressing direct connections to GVS&DD regional sewers.

BACKGROUND

The GVS&DD has a long-standing practice of only allowing direct connections from member jurisdictions to regional sewerage facilities. Exceptions to this practice, which have resulted in direct connections from private properties to regional facilities, have been considered in consultation with municipal members when no other viable options exist. A policy is required to provide clear direction regarding requests for direct connections. This policy provides consistency and guidance when preparing and reviewing connection applications.

This report is being brought forward to present the policy on direct connections to GVS&DD regional sewers.

DIRECT CONNECTIONS POLICY

GVS&DD member jurisdictions are responsible for collecting liquid waste from residents and businesses through a network of local collection pipes. The GVS&DD receives and conveys collected wastewater through a network of regional sewer pipes to various treatment facilities. This delineation of service, and the GVS&DD’s long standing practice of permitting only municipal connections to the regional liquid waste system, is informed by the following considerations:

- Large regional sewers are often designed to operate under high flows and pressure. Unfavourable conditions such as surcharging, backwatering, malodorous air, corrosive flows, and unfavourable air pressure conditions can increase the risk of health and safety issues for private properties with a direct connection to a regional sewer.
- Failures involving connections to GVS&DD facilities are typically expensive and difficult to repair due to high flows and pressure, and the inability of the GVS&DD to temporarily re-direct the large flows during repairs.

The current practice of only permitting municipal connections, except in extremely unusual circumstances, to the regional system is supported by wording in the GVS&DD Act (the Act), which references member jurisdictions seeking connection to an existing sewer or drain. The existing process and request form, available on the Metro Vancouver website, only permits a member jurisdiction to apply for a direct connection in accordance with the Act. Historically, some member jurisdictions have requested exceptions to allow direct connections to service private property within their boundaries if municipal sewers were not reasonably available to service those properties. Metro Vancouver has assessed those requests on a case-by-case basis. As opportunities arise, Metro Vancouver reviews existing private direct connections for conversion to municipal connections.

The policy defines the process and criteria required for all existing and new direct connections to GVS&DD facilities. Requests from member jurisdictions for direct municipal connections to a GVS&DD facility will be considered under the existing process. The policy prohibits permanent private direct connections to regional facilities. Under exceptional circumstances, if it is not feasible for a private property owner to connect to a municipal facility and there is a non-pressurized regional facility nearby, then the member jurisdiction may apply for a temporary private direct connection to a regional facility on behalf of the property owner. The application must include an engineering report that clearly demonstrates and recommends that a temporary direct connection to a GVS&DD facility is the only feasible option.

The policy clarifies the terms and conditions under which new temporary private direct connections may be considered by Metro Vancouver. It also outlines the conditions under which any existing private direct connection must be removed (e.g. installation of municipal sewer within 15 metres of the private property and a municipal requirement for a new connection) and under which any future temporary direct connection must be removed (e.g. installation of a new municipal sewer across the frontage of the property). The removal clauses contain exemptions if, in the opinion of Metro Vancouver, the orientation of the new municipal sewer is not reasonably compatible with on-site plumbing (e.g., would require a new connection on the opposite side of the property).

The policy also clarifies that no new connections will be considered from any non-member of the GVS&DD without Board approval.

ALTERNATIVES

1. That the GVS&DD Board approve the *Direct Connections to Regional Liquid Waste Facilities Policy* as presented in the report dated November 8, 2019, titled “Direct Connections to Regional Liquid Waste Facilities Policy”.
2. That the GVS&DD Board receive for information the report dated November 8, 2019, titled “Direct Connections to Regional Liquid Waste Facilities Policy”, and provide alternate direction.

Staff recommend Alternative 1.

FINANCIAL IMPLICATIONS

There are no budget implications for the GVS&DD. The costs related to direct connections are borne by the property owners and/or municipality.

SUMMARY / CONCLUSION

Currently, no GVS&DD Board-approved policy exists regarding requests for direct connections to regional liquid waste facilities from municipal and other properties. The GVS&DD has a long-standing practice of only permitting member jurisdictions to make direct connections to regional facilities. Requests for exceptions to this practice have been considered in cases where a private property within the boundaries of a member jurisdiction requires a new connection and if municipal sewers are not reasonably available to the private property owner for this purpose. This policy is intended to formally identify how requests for direct connections to regional facilities may be made, including who may apply for direct connections, the process and criteria to do so, and subsequent ownership and maintenance responsibilities.

Attachment

1. *Direct Connections to Regional Liquid Waste Facilities Policy (Doc #32742851)*

32753709

DIRECT CONNECTIONS TO REGIONAL LIQUID WASTE FACILITIES

Effective Date:

Approved By: GVS&DD Board

PURPOSE

To establish the process and criteria for direct connections to Metro Vancouver's regional liquid waste facilities and to define subsequent ownership, financial and maintenance responsibilities. This Policy applies only to facilities used in the management of sanitary sewage or combined sewage (e.g. drainage facilities are excluded).

DEFINITIONS

"Board" means the Board of Directors of the Greater Vancouver Sewerage and Drainage District (GVS&DD);

"Legacy Private Direct Connection" refers to a Private Direct Connection approved by the GVS&DD in association with the granting of a Statutory Right of Way (SRW);

"Member Jurisdiction" means a member of the GVSⅅ

"Metro 2040" means the *Regional Growth Strategy Bylaw (Metro Vancouver 2040)*, as amended from time to time;

"Municipal Direct Connection" means a direct connection from a sewer or force main owned by a Member Jurisdiction which is designed to convey sewage from one or more properties to a GVS&DD sewer facility;

"Non-Member" means a local, Provincial, Federal, or First Nation government that is not a Member Jurisdiction;

"Non-Pressurized" means that a sewer facility does not experience water levels in excess of the top of the conveying pipe to which the connection is proposed;

"Private Direct Connection" means a direct connection from a Private Property to a GVS&DD sewer approved by the GVS&DD prior to the effective date of this Policy;

"Private Property" means private property contained within the boundaries of a Member Jurisdiction;

"Property" means Federal, Provincial, First Nation Lands, municipal, or private property within the sewerage area service boundaries of the GVSⅅ and

“Temporary Private Direct Connection” means a private direct connection approved by the GVS&DD on a temporary basis on or after the effective date of this Policy.

POLICY

GVS&DD member jurisdictions collect liquid waste from Properties through a network of municipal sewers. The municipal sewers connect directly to the GVS&DD’s regional sewer system which conveys the liquid waste through large pipes for treatment at regional wastewater treatment plants.

Metro Vancouver permits Municipal Direct Connections to GVS&DD facilities from Member Jurisdictions; as per Section 29(1) of the *GVS&DD Act*, all requests by Member Jurisdictions for connections must be approved by Metro Vancouver. The application process and criteria for a Municipal Direct Connection and a Temporary Private Direct Connection are outlined in the following sections.

Under exceptional circumstances in the past, Metro Vancouver has approved requests from Member Jurisdictions for Private Direct Connections to the regional system. Metro Vancouver does not permit any new Private Direct Connections to GVS&DD facilities. Existing Private Direct Connections are subject to removal under terms and conditions outlined in the following sections.

In the future and under exceptional circumstances, Metro Vancouver may consider approval of new Temporary Private Direct Conditions; these connections will be subject to removal under terms and conditions outlined in the following sections.

PROCESS AND CRITERIA FOR A MUNICIPAL DIRECT CONNECTION

Metro Vancouver will only consider an application to connect a municipal sewer to the regional sewer system if the following criteria are met. The Member Jurisdiction must:

- ensure the new serviced area is within a GVS&DD sewerage area and meets the provisions of *Metro 2040*;
- use the appropriate form, currently Form 35A – Application for Connection – Sewer or Drain, on the Metro Vancouver website to apply for a direct connection to a regional facility; and
- confirm:
 - the connecting sewer is municipally-owned;
 - the connection meets GVS&DD connection requirements;
 - the connection meets the provisions of the *GVS&DD Sewer Use Bylaw* and related bylaws under the Liquid Waste Regulatory Program; and
 - the member jurisdiction will coordinate and be responsible for the connection work, contractor, and all connection costs.

Metro Vancouver staff will review the application for a Municipal Direct Connection from a regional perspective, including consideration of feasibility and technical considerations (e.g. opportunities to minimize and/or consolidate connections). As appropriate, an approval letter may be issued with related terms and conditions.

Unless ownership is otherwise noted on drawings, or other documents, the member jurisdiction will own the portion of the connection pipe located on municipal property, or municipal rights-of-way up to a point specified in the GVS&DD connection requirements.

EXCEPTION TO MUNICIPAL DIRECT CONNECTION – TEMPORARY PRIVATE DIRECT CONNECTION

To protect regional and private infrastructure, the GVS&DD will not approve any new Private Direct Connections. Regional sewers are typically large diameter pipes that are subject to extremely high flows and pressure. For this reason, and other factors such as malodorous air, corrosive flows, backwatering, and surcharging, Private Direct Connections may cause significant risk to the private property owner. Failures involving connections to GVS&DD facilities are typically expensive and difficult to repair due to the high flows and pressures associated with the regional facility and the inability of GVS&DD to temporarily re-direct very large flows during repairs.

However, under exceptional circumstances, if a Member Jurisdiction believes that no feasible municipal sewer facility is available for a Private Property, the Member Jurisdiction may apply to Metro Vancouver for a Temporary Private Direct Connection to a regional facility. The process and criteria for Temporary Private Direct Connections follow.

PROCESS AND CRITERIA TO APPLY FOR A TEMPORARY PRIVATE DIRECT CONNECTION

Metro Vancouver will not consider an application for a Temporary Private Direct Connection unless the following process is followed and the following criteria are met.

The owner of the Private Property must first apply to their Member Jurisdiction for a connection to a suitable municipal sewer facility. If a connection to a municipal sewer is not feasible then the Member Jurisdiction must:

- ensure that the applicant's property is within a GVS&DD sewerage area and meets the provision of *Metro 2040*:
 - if outside a sewerage area, the member jurisdiction must first apply to Metro Vancouver to have the property included in an appropriate sewerage area. This separate process is outlined in the *Regional Growth Strategy, Metro 2040 Implementation Guideline 7 – Extension of Regional Sewerage Services*.
- submit an application, currently Form 35A – Application for Connection – Sewer or Drain, on the Metro Vancouver website, to apply for a Temporary Private Direct Connection to a GVS&DD facility;
- submit an engineering report to Metro Vancouver that:
 - confirms that no on-site treatment or alternative disposal system is feasible and recommends that a Private Direct Connection to a GVS&DD sewer is the only feasible option;
 - confirms that no municipal sewer facility is within 15 metres of the nearest property line;
 - confirms that a non-pressurized GVS&DD sewer (current and future conditions) is adjacent to the property;
 - outlines costs associated with potential options for connecting to the GVS&DD sewer, which will be borne by the member jurisdiction; and,
 - provides an estimate of how long a temporary connection will be required.

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- ensure the connection meets the provisions of the GVS&DD Sewer Use Bylaw and related bylaws under the Liquid Waste Regulatory Program; and
- confirm that the Member Jurisdiction will coordinate and be responsible for the connection work, contractor, and all connection costs.

Metro Vancouver staff will review the application for a Temporary Private Direct Connection from a regional perspective, including consideration of feasibility, appropriate land use, and technical considerations.

REQUIREMENTS FOR APPROVAL OF A TEMPORARY PRIVATE DIRECT CONNECTION

If the GVS&DD approves a Temporary Private Direct Connection, requirements will be provided to the Member Jurisdiction that may include the following and other related terms and conditions:

- GVS&DD's required connection details;
- location of the connection and schedule of the connection work;
- discharge limits; and
- requirements for:
 - the member jurisdiction to retain an Engineer-of-Record;
 - the member jurisdiction to own a portion of the sewer between the private sewer (e.g. typically from property line) and the GVS&DD facility;
 - GVS&DD to review the installation; and
 - all aspects of the connection including design, construction and inspections with all associated costs to be borne by the member jurisdiction.

Once installed, the Member Jurisdiction will own, and be responsible for, all aspects of the Temporary Private Direct Connection, including ongoing operations and maintenance, upgrades, and decommissioning costs for temporary connections when a suitable new connection is installed.

REMOVAL OF PRIVATE DIRECT CONNECTIONS

An existing Private Direct Connection shall be subject to removal when a Member Jurisdiction requires a new connection (e.g. change in land use, property consolidation, major renovation) and has installed a sewer within 15 metres of the Private Property, except as noted below.

Metro Vancouver will not require removal of the Private Direct Connection if, in its opinion, the orientation of the new sewer is not reasonably compatible with the existing site plumbing (e.g. would require a new connection on the opposite side of the Property).

When an existing Private Direct Connection is removed, the Member Jurisdiction shall be responsible for decommissioning the existing connection per GVS&DD requirements and establishing a suitable new connection at their cost.

REMOVAL OF TEMPORARY PRIVATE DIRECT CONNECTIONS

An existing Temporary Private Direct Connection shall be subject to removal when a Member Jurisdiction installs a new sewer within the road allowance adjacent to the Private Property. Metro Vancouver will not require removal of the Temporary Private Direct Connection if, in its opinion, the

BOARD POLICY

orientation of the new sewer is not reasonably compatible with the existing site plumbing (e.g. would require a new connection on the opposite side of the Property).

When an existing Temporary Private Direct Connection is removed, the Member Jurisdiction shall be responsible for decommissioning the existing connection per GVS&DD requirements and establishing a suitable new connection at their cost.

LEGACY PRIVATE DIRECT CONNECTIONS

Prior to the implementation of this Policy, certain Private Direct Connections were permitted in return for a property owner granting a Statutory Right of Way (SRW) in favour of the GVS&DD allowing a regional pipe across private property. These are Legacy Private Direct Connections. If a municipal bylaw requires the property owner of a Legacy Private Direct Connection to seek a new connection, then Metro Vancouver staff will review the terms of the original SRW and the municipal bylaw to determine which governs. Metro Vancouver will not consider future Legacy Private Direct Connections through the SRW process except as otherwise directed by the Board.

DIRECT CONNECTIONS FOR NON-MEMBERS

Direct connections for Non-Members will only be approved as directed by the Board.

To: Liquid Waste Committee

From: Larina Lopez, Division Manager, Corporate Communications, External Relations

Date: November 1, 2019 Meeting Date: November 14, 2019

Subject: **2019 Regional Unflushables Campaign Results**

RECOMMENDATION

That the Liquid Waste Committee receive for information the report dated November 1, 2019, titled “2019 Regional Unflushables Campaign Results”.

PURPOSE

To update the Committee on the results of the 2019 regional Unflushables Campaign to reduce the disposal of wipes and other materials into the sewer system, which took place in the spring and summer of 2019.

BACKGROUND

The flushing of disposable wipes and other items causes ongoing problems for the sewer system and can result in clogs, sewer overflows into the environment and damaged equipment. Medications are also difficult for treatment plants to fully remove and may end up in the aquatic environment. Now in its third year, the regional Unflushables Campaign educates residents about how to properly dispose of seven priority items that are a problem for the wastewater system.

This report provides a synopsis of the 2019 regional Unflushables Campaign results, as identified in the 2019 Liquid Waste Committee Work Plan.

2019 REGIONAL UNFLUSHABLES CAMPAIGN

The main portion of the 2019 Unflushables Campaign ran from April 1 to May 26 with engagement at various public events that continued through the summer. The campaign continued to target both men and women, educating residents about the correct disposal of seven priority items: wipes, paper towels, hair, floss, tampons and applicators, condoms and medications.

Campaign Elements and Approach

The campaign delivered its message in a humorous and lighthearted way and continued to use the creative concept and other elements proven to work in previous years. While the campaign covered seven items, it gave extra emphasis to wipes, which remains the most problematic item for the wastewater system. New elements were added to keep the campaign fresh, including:

- an April 1st “Don’t be Fooled” launch event at Vancouver’s Waterfront Skytrain Station;
- two new campaign mascots (“Pee” and “Poo”);
- two new animated videos profiling [disposable wipes](#) and [hair](#);
- front page ads on the Star Metro newspaper on April 1st
- homepage of the Vancouver Sun and Postmedia Network (i.e. Vancouver Province and National Post);

- news hour advertising and a morning interview on CityTV's Breakfast Television segment; and
- a new interactive wastewater display used at public events.

The media buy for the campaign also featured advertising on social media (Facebook, YouTube, Twitter, Instagram), washroom posters, Google banner ads, Google Search, an interactive game played through movie-goers' smart phones before movies, and a campaign website (see Attachment 1 for examples). Outreach teams attended events around the region to have face-to-face conversations and engage residents around unflushable issues. Participants answered a skill-testing question in order to earn a branded toilet paper roll with campaign messaging.

Collaboration with Members

Campaign details and creative materials were shared with members' communication staff and liquid waste staff before the campaign's launch through email communication and regional meetings. All materials are made available for download on the Metro Vancouver website, and custom, co-branded materials can be created upon request. As with all Metro Vancouver behavior change campaigns, all Member jurisdictions were included in the media buy. This means that campaign ads appeared in every member jurisdiction, whether they were physical ads, print or online content, or digital ads. Members can amplify Metro Vancouver's campaigns in their own communities by using the materials provided by Metro Vancouver in their own assets (such as transit shelters, facility screens or social media channels).

Members also had opportunities to take part in the campaign by sharing the creative and messages on their social media channels, placing posters in washrooms in municipal facilities and hosting outreach teams at community events.

Evaluation

Metro Vancouver used various indicators to evaluate the campaign, including a regional post-campaign survey, tracking website and digital metrics, and more qualitative information from outreach team reports.

Post campaign survey results

A regional post-campaign survey of 1158 residents was conducted from May 27 to June 10. Survey results showed that:

- 31% of residents remembered seeing the campaign, almost double that of the 2018 campaign, which reached 16% of residents;
- awareness was highest among younger residents aged 18 to 34, with 41% recall of the campaign;
- roughly half (55%) of those who saw the campaign did so through news media or articles, followed by social media (41%);
- one third of those who saw the campaign discussed it with someone else; and
- the majority of respondents who saw the campaign advertising said they were less likely to flush the items featured in the campaign.

Digital and social media results

The post-campaign report on media promotion and the monitoring of non-paid channels showed that the digital and social media elements of the campaign performed well, reaching over 651,000 people. Much of the online engagement was related to the campaign mascots where there was a notably high level of engagement. Results included:

- a very high level of engagement on social media platforms, with 3,321 reactions (including 304 comments, 1,133 shares) on Facebook and Instagram and 11,801 tweet engagements;
- over 1,000 comments on external websites;
- 16,029 website visits;
- 1.8 million video views, with an above average rate of viewing videos to completion; and
- 35,884 plays (19% play rate) of the cinema game, with over 185,000 viewers exposed to the game's content.

Media coverage

Coverage of the new Pee and Poo campaign mascots went viral on social media and news outlets in late May, generating a total of 283 news hits from May 30 to June 7. These included 161 broadcast stories (53 TV, 107 radio), 118 online stories and four print stories in Canada, USA and Europe. In addition to increasing campaign awareness, media coverage during this period directly contributed to a significant jump in campaign website traffic, social media followers, video views and interest from cities outside of Metro Vancouver wanting to use campaign materials and develop their own mascots. Several cities, wastewater professionals and organizations shared the story on social media, citing the campaign as an example of an effective approach to wastewater issues. Mascot coverage was generally positive and had an estimated advertising value of almost \$800,000 (see Attachment 2 for details). Additionally, posts on Metro Vancouver's own social media channels regarding the mascots appearing at upcoming events received higher average number of reactions, compared to other Metro Vancouver posts.

Outreach

The outreach team attended events in six municipalities (Richmond, Port Coquitlam, Surrey, Langley, Coquitlam, Port Moody), interacting with residents to discuss unflushables issues and distribute over 4500 rolls of campaign-branded toilet paper. The mascots were a popular presence at events for handshakes, hugs and selfies, and were specifically requested by cities hosting events. The mascots also visited the Systems, Applications and Products Inc. (SAP) office in Vancouver to engage its 1500 employees on unflushables issues and create [a video](#) documenting the office's recent costly clogging incident.

Lessons learned

The 31% recall rate is a strong result for this campaign and is on par with some of the highest results seen for other Metro Vancouver campaigns. The significant increase in recall is mainly due to the earned media and social media engagement generated by the campaign mascots. The mascots piqued public and media interest, generating high levels of engagement and sharing of the campaign that helped to broaden the campaign's audience beyond the core 18-44 demographic.

Survey results show that most Metro Vancouver residents are aware of what items should not be flushed and that this has a positive impact on their behaviour. Nevertheless, a substantial portion still

occasionally flush personal items down the toilet, largely because of convenience. Knowledge that flushing personal items down the toilet will harm their plumbing and the environment may help reduce this behaviour and could be emphasized more strongly in future campaigns. While the campaign was most successful at reaching younger residents (18 to 34), younger residents and men are still the most likely to flush personal items down the toilet. Additional research and strategies specific to these groups may be required to better understand what would motivate them to adopt desired behaviours.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The budget for the regional Unflushables outreach program is \$190,000. These costs are included in the 2019 Liquid Waste Communications Program Budget managed by the External Relations Department. An additional \$5,000 from the Liquid Waste budget was used to accommodate the unexpected demand for the unflushables campaign mascots at events, however, there were still requests that could not be accommodated. In anticipation of similar and more frequent requests for outreach and education related to liquid waste initiatives, an additional \$50,000 has been approved for the 2020 budget.

SUMMARY / CONCLUSION

The flushing of disposable wipes and other unflushable materials is an ongoing issue for the region's wastewater system and can lead to clogs, sewer overflows and damaged equipment. Some materials, like medications, are difficult to fully remove through treatment and may end up in the environment. Metro Vancouver's 2019 regional Unflushables Campaign, now in its third year, targeted both men and women to educate them about seven priority items that should not be flushed (wipes, paper towels, hair, floss, tampons and applicators, condoms and medications). The campaign ran from April 1 to May 26 and included an April 1st launch event, new campaign mascots (Pee and Poo), new videos, a morning TV interview, front page newsprint ads, an interactive cinema game, promotion on social media (Facebook, Twitter, Instagram and YouTube) and outreach at public events.

A post-campaign survey showed 31% of residents recalled the campaign, nearly double that of the 2018 campaign, and most people who saw the campaign said they were less likely to flush personal items. The campaign generated a very high level of engagement on social media platforms, as well as over 16,000 website visits and 1.8 million video views. Coverage of the new mascots went viral on social media and news outlets in late May, generating a total of 283 news hits from May 30 to June 7, and was one the main reasons for the increased campaign recall. Several cities, wastewater professionals and organizations shared the story on social media, citing the campaign as an example of an effective approach to wastewater issues. Mascot coverage was generally positive and had an estimated advertising value of almost \$800,000. Over the course of six community events, the outreach team engaged over 4,500 residents with skill-testing questions to hand out branded rolls of toilet paper with campaign messaging. While most residents surveyed are aware of what should not be flushed, many still occasionally flush personal items, particularly younger residents and men. More research may be needed to better understand how to motivate these groups to adopt desired behaviours.

Attachments:

1. Sample of Unflushables Campaign materials
2. Unflushables Campaign Coverage Summary

Reference:

1. [Unflushables Campaign Web Page](#)

31473940

Samples of Unflushables Campaign Materials



April 1st launch event at Waterfront station in Vancouver



Interactive cinema game



Unflushables handout



Digital banners



Mascots at community event



Interactive game



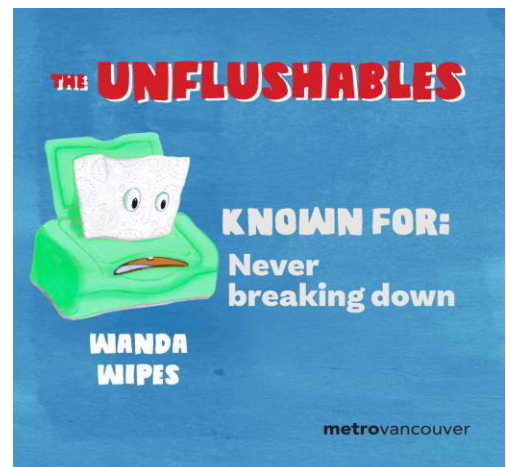
Metro Vancouver @metrovancoverbc
May 11

Limbering up for today's Public Works event in Richmond. We're on site from 11 - 2 to talk about what's okay to flush! #RmdWorks #RichmondBC #unflushables #metrovancover

[Read Less](#)



Instagram post



Social media image



Event team with campaign toilet paper



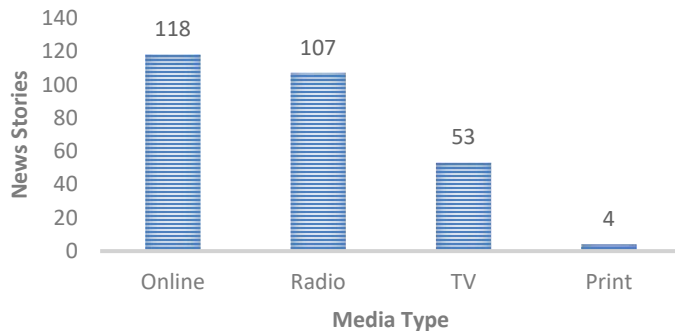
New video - Wipes in the Workplace

Unflushables Campaign Coverage Summary - April 30 – May 7, 2019

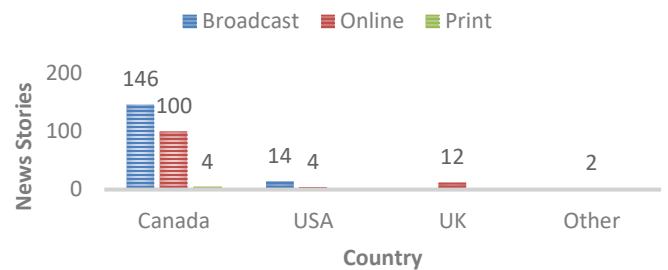


Total News Stories: **283**
 Cumulative Reach: **73,029,506**
 Est. Ad Rate: **\$798,968**

COVERAGE BY TYPE



COVERAGE BY COUNTRY



TOP MEDIA OUTLETS



TV

- Fox News Channel
- Fox 5 Washington
- CTV News Channel
- Global News BC
- CTV Calgary
- Global News Calgary
- Global News Toronto



RADIO

- The Fan Minneapolis
- Rip City Radio Portland
- Newstalk 1010 Toronto
- CKNW (Simi Sara)
- CJAD Montreal
- CFRA Ottawa



ONLINE

- [Irish Examiner](#)
- [Belfast Telegraph](#)
- [Le Journal de Québec](#)
- [Vancouver Sun](#)
- [Vancouver Is Awesome](#)
- [Dailyhive](#)

EXAMPLES OF TV COVERAGE



Earned Media

Of the **283 total news hits**, there were 161 broadcast stories (53 TV, 107 radio), 118 online stories and 4 print stories. The campaign earned some international interest as well with 13 stories from Europe (mostly UK and Ireland) and 18 from the US, including 3 mentions on FOX News (The Final 5, The Ingraham Angle, and online news), and inclusion as a link in an article on Sport Illustrated's website. There were also two French language stories from Quebec.

In terms of sentiment, news outlets had fun with the story, even if some of the coverage was mocking in tone. The vast majority of stories would turn in tone to an appreciation of the issue and included Metro Vancouver's key messages (don't flush wipes, unflushables). Quotes featured were from Liquid Waste Committee Chair Richard Stewart and/or Corporate Communications Division Manager Larina Lopez.

Metro Vancouver's Social Media, Video and Website

During the same period, there was a significant increase in activity on Metro Vancouver's social media platforms and website. Traffic to the Unflushables web page increased by 82%, and the average weekly follower growth on Twitter and Facebook doubled compared to the previous week. The increased web traffic also resulted in a 30% increase in views on the other Unflushables campaign videos. The campaign launch video received nearly 15,000 organic video views on Facebook and 4,500 video views on Vimeo.

Some of the Notable Stories:

[Vancouver Is Awesome](#), [DailyHive](#), Newstalk 1010 Toronto with Evan Solomon, The Final 5 (Washington), Global News BC, [Belfast Telegraph](#), [Le Journal de Québec](#)

Examples of Supportive Social Media Comments:



Industry Interest and Support:

Additionally, the Unflushables campaign gained attention from other local governments and wastewater professionals, both in and outside the region. Several cities and organizations shared the story on social media, citing the campaign as an example of an effective approach to wastewater issues. The Regional District of Nanaimo reached out for advice on building their own mascots, and Metro Vancouver received multiple requests for the mascots to visit schools, community events and other cities.

To: Liquid Waste Committee

From: Tom Sadleir, Program Manager, Community Engagement, Liquid Waste Services

Date: November 8, 2019 Meeting Date: November 14, 2019

Subject: **Public Notification of Sewer Overflows and Wastewater Treatment Plant Process Interruptions**

RECOMMENDATION

That the GVS&DD Board approve the scope of the public notification program for sewer overflows and wastewater treatment plant process interruptions and authorize staff to proceed with the engagement process as presented in the report dated November 8, 2019, titled “Public Notification of Sewer Overflows and Wastewater Treatment Plant Process Interruptions”.

PURPOSE

To seek approval of the scope of the public notification program for sewer overflows and wastewater treatment plant process interruptions and authorize staff to proceed with an engagement process.

BACKGROUND

On September 11, 2019, the BC Minister of Environment and Climate Change Strategy wrote to MVRD Board Chair and Directors regarding Metro Vancouver’s request to extend the review cycle timeline for the GVS&DD *Integrated Liquid Waste and Resource Management Plan* by two years (Attachment 1). In granting the extension, the Minister imposed seven conditions, one of which was that Metro Vancouver “develop a system to notify the public, in real time, of sewer overflows and wastewater treatment interruptions” by October 30, 2020.

This report outlines the scope for an engagement process to gather feedback that will be used to shape the public notification program for sewer overflows and wastewater treatment plant (WWTP) process interruptions.

Sewer Overflows and Wastewater Treatment Plant Process Interruptions

The Metro Vancouver *Board Strategic Plan* directs staff to manage the liquid waste system in a manner that protects public health and the environment. Liquid Waste Services strives to achieve this mandate through the conveyance and treatment of the region’s wastewater, however, discharges of untreated wastewater into regional water bodies are sometimes unavoidable mostly due to insufficient system capacity during wet weather, power outages, and the legacy of combined sewer systems.

Current Reporting

Sanitary sewer overflows (SSOs), dry weather combined sewer overflows (CSOs) and WWTP process interruption-related discharges are currently reported to government agencies and member municipalities. Measured volumes of wet weather CSOs, along with information on all discharges, are reported annually on Metro Vancouver’s web site.

Work to Date

Over the past few years, Metro Vancouver has conducted extensive environmental modelling, simulations and monitoring to assess the impact of SSOs and WWTP process interruptions, and has identified approximately 200 potentially impacted water users (commercial, industrial and agricultural water users, First Nations and parks with water access).

Phased Approach to Public Notification

Metro Vancouver's liquid waste system annually experiences approximately five WWTP process interruptions and 30 - 80 SSOs.

Metro Vancouver will notify the public in real time of sewer overflows and WWTP process interruptions. The tool for real time notification will be developed in the following phases:

Phase 1

Metro Vancouver will notify potentially impacted water users, identified in the work to date, of SSOs and WWTP process interruptions in their area in real time, via automated emails similar to the way regulatory agencies and municipalities are currently notified.

Phase 2

Metro Vancouver will notify the broader public of SSOs and WWTP process interruptions through the development of an online real time occurrence map, similar to the map developed by [King County/Seattle, Washington](#).

Phase 3

Metro Vancouver will address the public notification of CSOs in collaboration with staff from member municipalities, regional health authorities and the Ministry of Environment and Climate Change Strategy.

All public notification mechanisms will be developed by Liquid Waste Services, IT and External Relations.

ENGAGEMENT AND COMMUNICATION PROCESS

The objectives of the engagement and communication process supporting the public notification of sewer overflows and WWTP process interruptions are to:

- Create public awareness about liquid waste management in the region, sewer overflows and WWTP process interruptions, and why they happen
- Work with municipalities and health authorities to address public concerns related to sewer overflows and WWTP interruptions
- Inform the public about Metro Vancouver's ongoing work to prevent overflows

Activities and Timing

The following activities and timing by phase, are proposed to execute the objectives of the engagement and communications process:

Activity	Purpose	Timing
PHASE 1		
Letters/emails to potentially impacted water users	To introduce the targeted SSO and WWTP process interruption notification program, invite to attend an information session.	Q1 2020
Information sessions with potentially impacted water users (organized by geographic area: Burrard Inlet, Fraser River, Boundary Bay)	To provide context about the need for developing the public notification program	Q1 2020
Provide automated emails to potentially impacted water users	To inform potentially impacted water users when SSOs and WWTP process interruptions occur in their area	Q2 2020
PHASE 2		
Facebook posts, tweets, website home page article	To inform the broader public of a new real-time event occurrence map and invite interested parties for comments	Q2 2020
Launch real-time sewer overflow and WWTP process interruption occurrence map on Metro Vancouver website	To inform interested parties when SSOs and WWTP process interruptions occur	Q2/Q3 2020
PHASE 3		
Host workshop with municipalities, health authorities and the Ministry of Environment and Climate Change Strategy	To solicit input and develop a common approach to public notification of CSOs	Q2 2020

ALTERNATIVES

1. That the Board approve the scope of the public notification of sewer overflow and wastewater treatment plant process interruptions and authorize staff to proceed with the engagement process as presented in the report dated November 8, 2019, titled "Public Notification of Sewer Overflows and Wastewater Treatment Plant Process Interruptions".
2. That the Board receive for information the report dated November 8, 2019, titled "Public Notification of Sewer Overflows and Wastewater Treatment Plant Process Interruptions" and provide alternate direction.

Staff recommend Alternative 1.

FINANCIAL IMPLICATIONS

If the Board authorizes staff to proceed with the public notification program and engagement process, initial planning, the engagement and communication plan, and program start-up, those activities will be covered by the 2019 and 2020 Liquid Waste Services operating budget. The dedicated staff resources needed to maintain the program in the longer term if necessary, will be identified and confirmed through the 2021 budget planning process.

SUMMARY / CONCLUSION

On September 11, 2019, the BC Minister of Environment and Climate Change Strategy wrote to MVRD Board Chair and Directors regarding Metro Vancouver's request to extend the review cycle timeline for the GVS&DD Integrated Liquid Waste and Resource Management Plan by two years. In granting the extension, the Minister imposed seven conditions, one of which was that Metro Vancouver "develop a system to notify the public, in real time, of sewer overflows and wastewater treatment interruptions" by October 30, 2020.

Staff has developed a phased approach to the public notification of sewer overflows and WWTP process interruptions: During Phase 1: Metro Vancouver will notify approximately 200 potentially impacted water users, identified in work to date, of SSOs and WWTP process interruptions in their area in real time, via automated emails similar to the way agencies and municipalities are currently notified; In Phase 2: Metro Vancouver will notify the broader public of SSOs and WWTP process interruptions through the development of an online real time occurrence map, similar to the map developed by [King County/Seattle, Washington](#). And finally in Phase 3: Metro Vancouver will address the public notification of CSOs in collaboration with staff from member municipalities, regional health authorities and the Ministry of Environment and Climate Change Strategy.

An engagement and communication process has been developed to support the public notification program, including: an information session for potentially impacted water users (Phase 1); social media and online communications (Phase 2); and, a workshop with municipal staff, health authorities and the Ministry of Environment and Climate Change Strategy (Phase 3).

Attachment

1. Letter from the Minister of Environment and Climate Change Strategy to MVRD Chair and Directors – re: ILWRMP Extension, dated September 11, 2019

33161596



Reference: 346762
X-Ref: 10400-60 LWMP Metro Vancouver

SEP 11 2019

Sav Dhaliwal, Chair
and Directors
Metro Vancouver Regional District
4730 Kingsway
Burnaby BC V5H 0C6

Dear Chair Dhaliwal and Directors:

I am writing to follow up on my email of December 11, 2018, regarding an amendment of the Greater Vancouver Sewerage and Drainage District (GVS&DD) Integrated Liquid Waste and Resource Management Plan (ILWRMP) to extend the plan review cycle timeline by two years, to 2021.

I am satisfied that the public notification is adequate to support an amendment to your ILWRMP. Pursuant to Section 24(5) of the *Environmental Management Act*, I hereby approve the amendment to extend the review cycle of the ILWRMP from eight to ten years (to be initiated in 2021), subject to the condition that the GVS&DD work with ministry staff to address the following actions:

1. Develop approaches to involve and collaborate with local Indigenous Peoples for the development and implementation of the ILWRMP.
2. Refresh terms of reference for the Environmental Monitoring Committee (EMC). This would include, but is not limited to, a review of the mandate and objectives, membership, roles and responsibilities, meeting frequency and revisiting how monitoring programs are designed, reviewed, implemented and amended.
3. Review the membership of the Stormwater Interagency Liaison Group and consider including municipal members in leadership positions. Seek comments and advice from the EMC regarding initial adaptive management framework reports associated with municipal integrated stormwater management plans.
4. Submit one comprehensive report for each of the GVS&DD receiving water bodies (Fraser River, Burrard Inlet, Boundary Bay and the Strait of Georgia). The terms of reference should be developed in consultation with ministry staff prior to completing each report.

...2

5. Promote transparency by ensuring that data and summary receiving environment and ambient monitoring reports for each of the GVS&DD receiving water bodies are made accessible to the public at an appropriate level of complexity.
6. Develop a system to notify the public, in real time, of sewer overflows and wastewater treatment interruptions.
7. Prepare a comprehensive plan for the review of the ILWRMP that defines the scope of the review and how GVS&DD addressed the conditions of the May 30, 2011, Ministerial approval letter.

These actions must be completed to the satisfaction of the Director, *Environmental Management Act*, no later than October 30, 2020.

Approval of the ILWRMP does not authorize entry upon, crossing over or use for any purposes of private or crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority shall rest with the local government. This ILWRMP is approved pursuant to the provisions of the *Environmental Management Act*, which asserts it is an offence to discharge waste without proper authorization. It is also GVS&DD's and member municipalities responsibility to ensure that all activities conducted under this ILWRMP are carried out with regard to the rights of third parties and comply with other applicable legislation that may be in force.

Sincerely,



George Heyman
Minister

cc: AJ Downie, Director, Authorizations – South, Environmental Protection Division,
Ministry of Environment and Climate Change Strategy

To: Liquid Waste Committee

From: Tom Sadleir, Program Manager, Community Engagement, Liquid Waste Services

Date: October 28, 2019 Meeting Date: November 14, 2019

Subject: **Integrated Liquid Waste and Resource Management Plan Biennial Report 2017-2018
- Engagement Results**

RECOMMENDATION

That the Liquid Waste Committee receive for information the report dated October 28, 2019, titled "Integrated Liquid Waste and Resource Management Plan Biennial Report 2017-2018 - Engagement Results".

PURPOSE

To communicate the results of the engagement on the Integrated Liquid Waste and Resource Management Plan Biennial Report 2017-2018. The email submissions received and the Metro Vancouver response table will be forwarded to the Ministry of Environment and Climate Change Strategy.

BACKGROUND

On June 28, 2019, a report titled "Integrated Liquid Waste and Resource Management Plan Biennial Report 2017-2018" was presented to the GVS&DD Board, and it was resolved:

That the GVS&DD Board approve the "Biennial Report 2017-2018", dated May 28, 2019 and direct staff to:

- a) submit the "Biennial Report: 2017-2018", dated May 28, 2019, to the Ministry of Environment and Climate Change Strategy in accordance with the requirements of the "Integrated Liquid Waste and Resource Management Plan"; and*
- b) post the "Biennial Report: 2017-2018" on the Metro Vancouver website and arrange for the Liquid Waste Committee to receive comments and submissions on the "Integrated Liquid Waste and Resource Management Plan" progress, as described in the Biennial Report, at the September 19, 2019 meeting.*

This report provides the engagement activities and results.

ENGAGEMENT PROCESS

The Biennial Report 2017-2018 was posted to Metro Vancouver's website in July 2019. The following notification of opportunities to provide input on the report was provided:

- July 30, 2019 – letters to 34 First Nations and Tribal Councils
- August 2, 2019 – emails to 401 contacts on the Integrated Liquid Waste and Resource Management Plan database
- August 22, 2019 – newspaper advertisements: Vancouver Sun and Province

- September 19, 2019 – letter to 34 First Nations and Tribal Councils, reminding of deadline for receipt of input

All notification included a link to the Biennial Report (2017-2018), invitation to appear as a delegation to the September 19, 2019 Liquid Waste Committee meeting, and invitation to provide written input with a deadline of October 18, 2019.

Feedback

No delegations were received at the September 19, 2019 meeting of the Liquid Waste Committee.

The following email submissions were received:

- August 9, 2019 – Cindy Collins, Referrals Officer, Matsqui First Nation
- September 12, 2019 – Glen Parker, P.Eng., on behalf of the North Shore Streamkeepers and the North Shore Save Our Shores Society
- October 4, 2019 – Cindy Collins, Referrals Officer, Matsqui First Nation

Key themes emerging from the email submissions include concerns regarding regional population growth and marine contamination, and a desire for tertiary treatment at all regional wastewater treatment plants. These topics are addressed in the Metro Vancouver Board Strategic Plan, which provides direction to ensure that wastewater system capacity is aligned with regional growth, to understand the impacts of contaminants on the ecosystem, and to consider options for advanced levels of treatment. These issues will also be addressed in the review and update of the GVS&DD Integrated Liquid Waste and Resource Management Plan, which will be initiated in 2021.

The issues raised in the emails and Metro Vancouver's responses to those issues appear in Attachment 1: Issue-Response Table. The emails received appear in Attachment 2: Correspondence.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications.

SUMMARY / CONCLUSION

The report summarizes the results of the engagement on the Integrated Liquid Waste and Resource Management Plan Biennial Report 2017-2018.

No delegations were received at the September 19, 2019 Liquid Waste Committee meeting and three emails were received. Key themes emerging from the submissions include concerns regarding regional population growth and marine contamination, and a desire for tertiary treatment at all regional wastewater treatment plants.

The Metro Vancouver response table and the email submissions received will be forwarded to the Minister of Environment and Climate Change Strategy.

Attachments

1. Issue-Response Table
2. Correspondence

32937605

October 24, 2019

**ILWRMP 2017/2018 Biennial Report Feedback Summary
Issue-Response Table**

#	Issue/Comment/Question	Metro Vancouver Response
Email submissions August 9, 2019 and October 4, 2019 from Matsqui First Nation		
1	Concerned for the declining population of fish species and ecosystems in and around the Fraser River and its tributaries.	Metro Vancouver's environmental programs include fish health monitoring in the Fraser River, but the results do not indicate overall deteriorating environmental health patterns from upstream to downstream. Information collected includes data on number and species of fish caught, but there is not enough information to make an assessment on population trends. Metro Vancouver has not done any ecosystem inventories for the Fraser River.
2	Concerned about the growing population and the resulting outflows into waterbodies.	The population growth is expected to increase nutrient and contaminant load to the wastewater treatment plants (WWTPs). Upgrades to the collection system and WWTPs take into consideration regional growth, and a need to ensure compliance with the applicable environmental objectives and guidelines on an ongoing basis. Metro Vancouver's monitoring programs are designed to assess whether the provincial and federal regulatory requirements are being met, and if overall regional liquid waste discharges are effectively managed in a manner that is protective of human and aquatic life.
3	Recommends research into alternative sewage treatment systems that use cleaner environmental processes and materials to manage the outflow of effluents into Fraser River and other waterbodies. (Shared example of recommended closed-loop technology recycling plants designed to move the outflow and discharge into an on land facility/plant that will transfer back to the liquid waste plant with cleaner environmental material used.)	As part of the current upgrades to four of the region's five wastewater treatment plants (Northwest Langley, Iona Island, Annacis Island, and North Shore), Metro Vancouver explores and evaluates combinations of existing and new technologies to improve wastewater treatment to meet or exceed national and provincial wastewater treatment requirements. Since 2011, Metro Vancouver's Annacis Research Centre serves as a laboratory and test facility for universities and industry in evaluating innovations aimed at improving the operation and effectiveness of wastewater treatment. Presently, the use of recycled/reclaimed wastewater is limited due to user demand.
4	Question about if there are environmental studies and reports on liquid waste that may impact soils and waterways, especially near the Fraser River.	All environmental studies are summarized on an annual basis in the GVS&DD Environmental Management & Quality Control Annual Report, available on the Metro Vancouver's website here .



Email submission September 12, 2019 from North Shore Streamkeepers and the North Shore Save Our Shores Society:

5	Concerned about the negative impact of the cumulative effects of partially treated liquid wastes discharged into our waterways.	Metro Vancouver conducts comprehensive monitoring of the environmental health of water, sediments and biota in the vicinity of its liquid waste system outfalls. In addition, Metro Vancouver's ambient monitoring programs for the Fraser River and Strait of Georgia, among others, have been designed to assess the overall environmental health of the water bodies in the region. These programs provide information about background environmental conditions to help put into context findings of the receiving environment monitoring. The information collected through all of these monitoring programs and studies is used to understand the relative contribution of Metro Vancouver discharges into the waters of the lower Fraser River and the Strait of Georgia.
6	Believe that the 20% greater costs associated with treating liquid waste to a tertiary level is a reasonable price to pay for protecting the environment associated with liquid waste management.	The Metro Vancouver Board Strategic Plan (2019-2022) provides direction to "assess the value of moving to advanced levels of treatment, including tertiary treatment, at each of the wastewater treatment plants."
7	Request that Metro Vancouver adopt a policy of tertiary treatment for all liquid waste and seek ways to use the "clean" discharges to enhance our waterways and people.	The Metro Vancouver Board Strategic Plan (2019-2022) direction to "assess the value of moving to advanced levels of treatment, including tertiary treatment, at each of the wastewater treatment plants" and to "understand the impacts of contaminants on the ecosystem, and consider options for advanced levels of treatment."

ATTACHMENT 2

Subject: Input Opportunity - Integrated Liquid Waste and Resource Management Plan
Progress Report

Attachments: Lion's Gate Wastewater Treatment letter Wilkinson Beech 05 06 19.pdf; McKenna
SIGNED REPLY - Dhaliwal - MIN - 251337.pdf; LGWWTP Letter Provincial Liberals.pdf

From: [REDACTED]
Sent: Thursday, September 12, 2019 12:07 PM
To: LWMP <LWMP@metrovancover.org>
Cc: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED];
<[\[REDACTED\]](mailto:[REDACTED])>; [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED]; 'Lisa Muri' <Muril@dnv.org>;
'Jonathan. Wilkinson' <Jonathan.Wilkinson@parl.gc.ca>; 'Terry. Beech' <Terry.Beech@parl.gc.ca>;
<Catherine.McKenna@parl.gc.ca>; 'Glen Parker' <[REDACTED]>; 'Wiebe, Michael' <Michael.Wiebe@vancover.ca>;
[REDACTED] <[REDACTED]>; 'Lisa Muri' <Muril@dnv.org>; 'Dominato, Lisa' <Lisa.Dominato@vancover.ca>;
[REDACTED] <[REDACTED]>; [REDACTED] <[REDACTED]>;
[REDACTED]; mayor@dnv.org; mtrentadue@newwestcity.ca; rsvendsen@mapleridge.ca;
mayorandcouncillors@richmond.ca; sferguson@tol.ca; dwalker@whiterockcity.ca; mayor@langleycity.ca;
rvagramov@portmoody.ca; rstewart@coquitlam.ca; muril@dnv.org; doug.elford@surrey.ca;
lisa.dominato@vancover.ca; pietro.calendino@burnaby.ca; 'Tony Valente (Councillor)' <tvalente@cnv.org>; [REDACTED];
<[REDACTED]>; [REDACTED] <[REDACTED]>; 'Seyd, Jane (LMP)' <JSeyd@nsnews.com>; [REDACTED]; [REDACTED];
[REDACTED] <[REDACTED]>; 'George Orr' <george.orr@greenparty.ca>; ralph.sultan.MLA@leg.bc.ca;
jane.thornthwaite.mla@leg.bc.ca; jordan.sturdy.MLA@leg.bc.ca; bowinMa.MLA@leg.bc.ca; 'Milobar.MLA, Peter'
<Peter.Milobar.MLA@leg.bc.ca>; Chair Dhaliwal <chair@metrovancover.org>; Linda Buchanan <l.buchanan@cnv.org>;
'Mary-Ann Booth' <mbooth@westvancover.ca>; 'Mike Little' <littlem@dnv.org>
Subject: Input Opportunity - Integrated Liquid Waste and Resource Management Plan Progress Report

Hello: I have been away and realize I have missed the September 9th date for requesting to speak to the committee but I would like to have the following shared with the Liquid Waste Committee:

To Members of the Liquid Waste Committee:

I believe it is safe to say the views expressed below are supported by most "fish groups" and specifically I can speak for the North Shore Streamkeepers and the North Shore Save Our Shores Society.

The message to the committee is that cumulative effects matter and the partially treated liquid wastes discharged into our waterways have a negative impact. Treating liquid waste to a tertiary level costs about 20% more than the minimum legal limit of secondary treatment. We believe 20% is a reasonable price to pay for protecting the environment over the longer terms associated with liquid waste management infrastructure! We request Metro Vancouver adopt a policy of tertiary treatment for all liquid wastes and seek ways to use the "clean" discharges to enhance our waterways for fish and people. Metro attempts to be a leader in so many environmental areas: why are we a laggard with respect to liquid waste management?

Attached are letters to Metro supporting liquid waste treatment at levels beyond the "minimum legal standard" from the DFO Minister Jonathan Wilkinson/MP Terry Beech, from Environment Minister Catherine McKenna and the BC Liberals.

Glen Parker P.Eng.

Home: [REDACTED], Mobile: [REDACTED]

From: "Cynthia Collins" [REDACTED]
Date: August 9, 2019 at 9:07:42 AM PDT
To: <tom.sadleir@metrovancover.org>
Cc: "Alice" [REDACTED]
Subject: Liquid waste

August 9, 2019

Tom

Matsqui First Nation is concerned about the growing population and the outflows into waterbodies and would like to recommend that all sewage systems research other means of outflow of effluents into the Fraser River and other waterbodies that may be utilized.

For example some type of recycling plant to go around and around in the one system- to move the outflow and discharge into a on land facility/plant that will go back to the liquid waste plant and at the same time have cleaner environment material to be utilized in products mentioned.

With the declining population of fish species and ecosystems in and along the Fraser River and mouth of the Fraser River the sewage plants along the Fraser River may be contributing to the fact of the declining population.

Cindy Collins
Matsqui First Nation
Referral Officer

From: Cynthia Collins [REDACTED]
Sent: Friday, October 4, 2019 11:08 AM
To: Tom Sadleir <Tom.Sadleir@metrovancover.org>
Cc: alice.mckay [REDACTED]
Subject: File:PE-13-01-LW-005

Tom

Matsqui First Nation's concerns is with the environmental impacts that may impact soils and waterways especially if it is near the Fraser River.

Is there environmental studies and reports on this liquid waste? With the decreasing population and returns of wild fish species it is important to look at the big picture and ensure that fish are protected

Thanks

Cindy Collins
Matsqui First Nation
Referral Officer

To: Liquid Waste Committee

From: Brent Burton, Division Manager, Policy, Planning and Analysis, Liquid Waste Services

Date: October 31, 2019 Meeting Date: November 14, 2019

Subject: **Feasibility of a Regional Recreational Vehicle Sanitary Dump Facility**

RECOMMENDATION

That the Liquid Waste Committee receive for information the report dated October 31, 2019, titled "Feasibility of a Regional Recreational Vehicle Sanitary Dump Facility".

PURPOSE

This report responds to a request from the Liquid Waste Committee to provide information on the feasibility of a regionally-operated sanitary dump (sani-dump) facility within Metro Vancouver.

BACKGROUND

The report is being brought forward to respond to the following motion passed at the Liquid Waste Committee meeting of June 13, 2019:

That the Liquid Waste Committee direct staff to report back with information on the feasibility of a regional sani-dump location.

A sani-dump facility is designed to receive holding tank wastewater from Recreational Vehicles (RVs). This wastewater is generated from kitchens, showers and toilets within the RV. This sani-dump wastewater is usually discharged into the public wastewater collection system at designated sani-dump facilities.

EXISTING FACILITIES

There are numerous existing sani-dump facilities located in Metro Vancouver and neighbouring regions. Within Metro Vancouver, the Sanidump website (www.sanidumps.com) is a commonly-used resource for RV owners that identifies eleven existing locations, including sites within Vancouver, North Vancouver, Burnaby, Delta, and Maple Ridge. Most are located in RV parks and/or dealerships, provincial parks, and service stations. The website identifies three additional locations at RV parks in the region that are for use by registered guests only. The City of Vancouver recently opened a City-owned sani-dump facility adjacent to their National Works Yard at 701 National Avenue.

A number of private sani-dump facilities have closed in recent years. Closures have been attributed to factors including low returns on investment and operational challenges. Monitoring or supervision of a sani-dump facility is often required to prevent misuse of the system. Metro Vancouver enforcement staff have reported abuse and mistreatment of the sani-dump system, largely from commercial vehicles dumping chemicals or other non-compliant liquids into the wastewater system via sani-dumps. Metro Vancouver staff are currently reviewing regulatory options for sani-dumps to ensure that only RV and similar wastewater is accepted.

CITY OF RICHMOND'S CONSIDERATION OF A MUNICIPAL FACILITY

In 2012, the City of Richmond (City) released an Expression of Interest (EOI) for locating a sanitary dump facility with the City and offered up to \$10,000 to assist with the installation of utility services. City staff contacted several potential vendors; however, there was little interest in the opportunity and no vendors responded to the request. The lack of response to the EOI suggested that there was little interest for this type of operation from the commercial sector.

In a 2015 report to the Richmond Parks, Recreation & Cultural Services Committee, City staff also determined that siting a municipal sani-dump facility at the Lulu Island Wastewater Treatment Plant and/or operating a sanitary dump facility at the former Minoru sewage treatment plant were not feasible options for them at that time. *"Due to an absence of functional space, proven low return on investment and the labour-intensive nature of this type of operation"*, Richmond staff recommended that the City not pursue a City-owned sani-dump facility. An alternative option, noted in the staff report, was to advise owners of recreational vehicles to empty their holding tanks before returning to Richmond.

REGIONAL FEASIBILITY

Metro Vancouver currently operates five wastewater treatment plants (WWTPs). The location of the Iona Island WWTP is relatively isolated from major transportation corridors. The new North Shore WWTP is being built on a constrained site with no feasibility for a sani-dump. MV Operations staff advise that the Annacis WWTP currently does not have the physical space or protocols in place to accommodate a regional sani-dump facility. The Lulu Island WWTP was previously considered as a site for a municipal sani-dump facility, but was not considered feasible by the City at that time. The design process for upgrading the Northwest Langley WWTP is underway and, to date, no consideration for a regional sani-dump has been undertaken.

Through the Regional Engineers Advisory Committee Liquid Waste Sub-Committee, municipal staff recently advised that there has not been significant public interest in providing sani-dumps within their own municipalities. The challenges previously identified by City of Richmond staff in 2016, including the absence of functional space, proven low return on investment, and the labour-intensive nature of this type of operation will likely continue to exist at the regional level; additional information on these factors is outlined below.

Functional space. In 2016, responding to a new request from the City of Richmond, Metro Vancouver investigated the feasibility of accommodating a potential sani-dump facility at the Lulu Island WWTP. At that time, the site, located at the northwest corner of the plant property off Gilbert Road, could be made available until such time that the GVS&DD required the site for future plant works. Metro Vancouver staff concluded that this location would require a dedicated entrance, separate from the main WWTP entrance, in order to accommodate the necessary traffic management and security. As outlined in a letter of May 5, 2016 to the City of Richmond Mayor and Council (see Attachment), the cost of facility construction was estimated to be \$200,000, with an additional estimated \$10,000 in annual operating costs for a six-month duration (seasonal).

Equity and low return on investment. Given the capital and operating costs associated with a regional sani-dump facility, there are regional considerations of equity with funding such an investment given that it would service only the relatively small portion of the population that own RVs.

Existing private sector sani-dumps typically charge between \$5 and \$10 per vehicle. To fully recover the estimated annual operational costs of at least \$10,000, a regional facility would need to attract 1000 - 2000 vehicle trips in its 6 months of operation. In order to recover capital costs, this user fee would need to increase significantly.

Labour-intensive nature of this type of operation. Due to the high potential for misuse of a regional sani-dump facility, staffing, potentially combined with a monitoring system, would be required. In the absence of a staffed facility, security and monitoring systems, coupled with additional sampling and analysis, may be appropriate.

A regional sani-dump facility and the associated operating costs are not in the current GVS&DD program budget.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

This is an information report; there are no financial implications.

SUMMARY / CONCLUSION

The Liquid Waste Committee requested that Metro Vancouver staff investigate the feasibility of providing a regionally-operated sani-dump facility. Available information indicates that an estimated eleven sani-dump stations are already operating within Metro Vancouver, and that market interest is low in providing new facilities.

In 2016, at the request of the City of Richmond, Metro Vancouver investigated the option of accommodating a municipally-operated sani-dump facility at the Lulu Island WWTP. Conceptual construction costs were estimated at \$200,000, with an additional \$10,000 in annual operating costs. At that time, Richmond staff determined that operating a facility at Lulu Island WWTP, or on municipally-owned lands at the former Minoru treatment plant, was not feasible. The challenges cited by Richmond staff also likely exist at the regional level and are currently foreseen to continue; there are also potential considerations of equity in funding such an investment given that it would only service the relatively small portion of the population that own RVs.

Attachment

1. Excerpt from letter to City of Richmond without original attachments, titled "Recreational Vehicle Sanitary Dump Station", dated May 5, 2016.

*Office of the Commissioner/ Chief Administrative Officer
Tel. 604 432-6210 Fax 604 454-6614*

File: CR-07-01-RIC

MAY 05 2016

Mayor Malcolm Brodie and Council
City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1
VIA EMAIL: mayorea@richmond.ca

Dear Mayor Brodie and Council:

Re: Recreational Vehicle Sanitary Dump Station

Thank you for your letter asking Metro Vancouver to further consider establishing a sanitary dump station for recreational vehicles at the Iona Island or Lulu Island Wastewater Treatment Plants. We have been in contact with Richmond staff to discuss the feasibility and options for such a facility.

Unfortunately, a sanitary dump station located at the Iona Island plant is not feasible at this time due to the upcoming secondary treatment upgrade project which will have a significant impact on this location. Additionally, there are land tenure issues at this location as the Greater Vancouver Sewerage and Drainage District (GVS&DD) does not have full ownership of all lands at this site.

A potential alternative site may be available at the Lulu Island Wastewater Treatment Plant for a sanitary facility at this location once the construction works associated with the twinning of the Gilbert Trunk Sewer are complete. The area located at the northwest corner of the plant property off Gilbert Road would be available until such time that the GVS&DD requires the site for future plant works. An initial conceptual cost of approximately \$200,000 has been estimated to construct a facility at this location (see Attachments 1 and 2) and an annual cost of approximately \$10,000 is anticipated to operate the station for a six-month duration.

Given the cost of constructing a purpose-built sanitary dump facility, as an alternative we have attached a map (see Attachment 3) that identifies several existing RV sani-dump stations located within the region. Most are located in RV parks, dealerships, provincial parks, and service stations. We understand that some of the existing facilities have minimal usage and are operated seasonally, creating uncertainty with respect to year-round staffing, sufficient funding, security and maintenance issues.

As the expected use of a new facility in Richmond is uncertain, we propose that your municipality consider conducting a survey to determine the actual demand for a sanitary dump station located

within the City prior to proceeding further with this concept. Metro Vancouver staff are available to work with your staff to assist in considering these options.

Yours truly,

A handwritten signature in dark ink, appearing to read 'CMw'.

Carol Mason
Commissioner/ Chief Administrative Officer

CM/SS/FN/mw

cc: Robert Gonzalez, General Manager, Engineering & Public Works, City of Richmond
Tom Stewart, Director, Public Works Operations, City of Richmond

Attachments: (17571126)

1. Potential Location at the Lulu Island WWTP
2. Conceptual Layout and Costs
3. RV Dump Stations Map

To: Liquid Waste Committee

From: Roy Moulder, Director, Purchasing and Risk Management, Financial Services
Paul Wilting, Program Manager, Northwest Langley Treatment Projects, Project Delivery, Liquid Waste Services

Date: October 25, 2019 Meeting Date: November 14, 2019

Subject: **Award of Contract Resulting from Tender No. 19-212: Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank**

RECOMMENDATION

That the GVS&DD Board:

- a) approve the award of a contract in the amount of \$60,801,000 (exclusive of taxes) to NAC Constructors Ltd. resulting from Tender No. 19-212: Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank; and
 - b) authorize the Commissioner and the Corporate Officer to execute the contract.
-

PURPOSE

This report is to advise the GVS&DD Board of the results of Tender No. 19–212: Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank, and to recommend award of the contract in the amount of \$60,801,000 (exclusive of taxes).

BACKGROUND

Pursuant to the *GVS&DD Officers and Delegation Bylaw No. 284, 2014* (Bylaw) and the *Procurement and Real Property Contracting Authority Policy* (Policy), procurement contracts which exceed a value of \$5 million require the approval of the Board of Directors.

This report is being brought forward to the Liquid Waste Committee to consider a recommendation to the GVS&DD Board to authorize the award of a contract for the Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank.

PROJECT DESCRIPTION

The proposed Golden Ears Pump Station and Sanitary Sewer Overflow Storage Tank has been designed for two purposes: reduce sanitary sewer overflows (SSO) in the area, and to pump sewage from Maple Ridge and Pitt Meadows to the new wastewater treatment plant in the northwest corner of the Township of Langley.

The North Surrey/Maple Ridge interceptor systems have a chronic sanitary sewer overflow (SSO) issue, which is getting worse as the area develops. Hydraulic modelling indicates that a new pump station and SSO tank to store peak flows, will reduce or eliminate SSO's. During heavy rain, when the sewer capacity is exceeded, the pump station will pump the excess wastewater into the tank. As soon as capacity in the downstream system is available, sewage will be pumped to the Annacis Island WWTP for treatment.

The pump station has also been designed to convey wastewater flows from Pitt Meadows and Maple Ridge to the new Northwest Langley Wastewater Treatment Plant and replace the existing Katzie Pump Station. The proposed construction will see the building envelope constructed, however only the pumps to fill the SSO tank will be installed at this time. In 2026 as the treatment plant is nearing completion, the pumps needed to convey wastewater across the river will be installed along with the related electrical and control equipment.

The new pump station and storage tank will be located at the north end of the Golden Ears Bridge, immediately south of the existing Katzie Pump Station (see attached rendering “Golden Ears Pump Station and Storage Tank”).

As a result of Request for Qualifications No. 19-117: Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank, that was publicly advertised on Metro Vancouver’s and BC Bid websites, four experienced firms were shortlisted and invited to respond to Tender No. 19-212, for construction services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank. The tender closed on October 24, 2019 and the following firms submitted tenders:

Proponent	Tender Price (exclusive of taxes)
NAC Constructors Ltd.	\$60,801,000
PCL Constructors Westcoast Inc.	\$66,431,818
Graham Infrastructure LP.	\$70,207,227
AECOM Water Infrastructure Inc.	\$90,975,600

The bids were reviewed for completeness by members of the engineering project team and Purchasing and Risk Management Division. NAC Constructors Ltd. has been identified as the lowest compliant bid.

ALTERNATIVES

- 1) That the GVS&DD Board:
 - a) approve the award of a contract in the amount of \$60,801,000 (exclusive of taxes) to NAC Constructors Ltd. resulting from Tender No. 19-212: Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank; and
 - b) authorize the Commissioner and the Corporate Officer to execute the contract.
- 2) That the GVS&DD Board terminate Tender No. 19-212: Construction Services for Golden Ears Pump Station and Sanitary Sewer Overflow Tank and direct staff to report back to the GVS&DD Board with options for an alternate course of action.

FINANCIAL IMPLICATIONS

If the GVS&DD Board approves Alternative 1, a contract will be awarded to NAC Constructors Ltd. in the amount of \$60,801,000 (exclusive of taxes). The tender submitted by NAC Constructors Ltd. is the lowest compliant bid and is within the budget allocated for the project.

The GVS&DD Board has the choice not to proceed with Alternative 1, but staff will need further direction in relation to completion of the project. Alternative 2 will impede the corporation's ability to reduce sanitary sewer overflows into the Fraser and SSO's will continue at current levels.

SUMMARY / CONCLUSION

As part of the Northwest Langley Treatment Projects, Tender No. 19-212 was issued for construction of a pump station and sanitary sewer overflow storage tank. NAC Constructors Ltd. was identified as the lowest compliant bid. It is recommended that the GVS&DD Board authorize the Commissioner and Corporate Officer to award and execute a contract to NAC Constructors Ltd. in the amount of \$60,801,000 (excluding taxes).

Attachment

1. Golden Ears Pump Station and Sanitary Sewer Overflow Tank

33041725

Golden Ears Pump Station and Storage Tank





To: Liquid Waste Committee

From: Peter Navratil, General Manager, Liquid Waste Services

Date: October 25, 2019

Meeting Date: November 14, 2019

Subject: **Manager's Report**

RECOMMENDATION

That the Liquid Waste Committee receive for information the "Manager's Report", dated October 25, 2019.

1. Liquid Waste Committee 2019 Work Plan

Attached is the updated 2019 Work Plan indicating the status of the Committee's key priorities for this year.

Attachment:

1. Liquid Waste Committee 2019 Work Plan

Liquid Waste Committee 2019 Work Plan

Report Date: October 25, 2019

Priorities	
1st Quarter	Status
2019 Liquid Waste Capital Projects	Complete
Iona Island Secondary WWTP Project Definition Quarterly Update	Complete
North Shore Wastewater Treatment Plant Construction Update	Complete
Climate Change Impacts on Precipitation and Stormwater Management	Complete
Unflushables Campaign Update	Complete
GVS&DD DCC Bylaw Revisions	Complete
Municipal Requests for Sewerage Area Boundary Amendments (as applicable)	Complete
Utility Policies (as applicable)	Complete
Contract Approvals – Contracts > \$5M (as applicable)	Complete
2 nd Quarter	
Recreational Water Quality Monitoring	Complete
Status of Liquid Waste Capital Expenditures	Complete
Iona Island Secondary Wastewater Treatment Plant Project Definition Quarterly Update	Complete
Integrated Liquid Waste and Resource Management Plan Biennial Report 2017-2018	Complete
Biosolids Management Strategy	Complete
GVS&DD Membership Requests	Complete
Municipal Requests for Sewerage Area Boundary Amendments (as applicable)	Complete
Contract Approvals – Contracts > \$5M (as applicable)	Complete
Utility Policies (as applicable)	Complete
3rd Quarter	Status
Status of Liquid Waste Capital Expenditures	Complete
2018 GVS&DD Environmental Management & Quality Control Annual Report	Complete
Iona Island Secondary Wastewater Treatment Plant Project Definition Quarterly Update	Complete
Grease Campaign Update	Complete
Municipal Requests for Sewerage Area Boundary Amendments (as applicable)	Complete
Contract Approvals – Contracts > \$5M (as applicable)	Complete
Utility Policies (as applicable)	Complete
4th Quarter	Status
Annual Budget & 5 Year Financial Plan - Liquid Waste	Complete
Integrated Liquid Waste and Resource Management Plan Overview	Complete
Poplar Landing	Complete
Iona Island Secondary Wastewater Treatment Plant Project Definition Quarterly Update	Complete
Status of Liquid Waste Capital Expenditures	Complete
Sewer Overflow and WWTP Process Interruption Public Notification Process	Complete
Unflushables Campaign Results	Complete
Municipal Requests for Sewerage Area Boundary Amendments (as applicable)	Complete
Contract Approvals – Contracts > \$5M (as applicable)	Complete
Utility Policies (as applicable)	Complete
30 Year Financial Plan – Liquid Waste Scenarios	Deferred to 2020
Annual Energy Management Progress Update	Deferred to 2020
Capital Projects Policy Update	Deferred to 2020