



**To:** Public Works and Transportation Committee  
**From:** John Irving, P.Eng. MPA  
 Director, Engineering  
**Re:** Amendment Bylaws for Water and Sewer

**Date:** January 24, 2014  
**File:** 12-8060-20-  
 009099/Vol 01


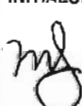

**Staff Recommendation**

That

- a) Waterworks and Water Rates Bylaw No. 5637, Amendment Bylaw No. 9099 be introduced and given first, second, and third readings; and
- b) Drainage, Dyke and Sanitary Sewer System Bylaw No. 7551, Amendment Bylaw No. 9101 be introduced and given first, second, and third readings.



John Irving, P.Eng. MPA  
 Director, Engineering  
 (604-276-4140)

REPORT CONCURRENCE		
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>
Sewerage & Drainage	<input checked="" type="checkbox"/>	
Water Services	<input checked="" type="checkbox"/>	
Finance	<input checked="" type="checkbox"/>	
Law	<input checked="" type="checkbox"/>	
<b>REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE</b>	<b>INITIALS:</b> 	<b>APPROVED BY CAO</b> 

## Staff Report

### Origin

Waterworks and Water Rates Bylaw No. 5637 (the “Water Bylaw”) and Drainage, Dyke and Sanitary Sewer System Bylaw No. 7551 (the “Sewer Bylaw”) govern the use of and access to the City’s water distribution system and drainage and sewer system, respectively. Updates to the bylaw are required periodically to address new or emerging issues.

### Analysis

The following is a description of the recommended changes to the Water Bylaw, as proposed with Amendment Bylaw No. 9099 (Attachment 1), and the Sewer Bylaw, as proposed with Amendment Bylaw No. 9101 (Attachment 2).

#### Water Bylaw Amendments

##### **Mandatory Water Metering for Single-Family Dwellings**

Starting in 2014, unmetered single-family dwellings will receive mandatory water meters through the Universal Single-Family Water Meter Program. Other single-family metering programs (volunteer, watermain construction, water service maintenance, building permit applications valued at over \$75,000) will continue in parallel with the new universal program. The proposed Water Bylaw amendment includes the requirement for all single-family dwellings to be metered.

##### **Metered Water Charge Guarantee**

The current Water Bylaw provides a first-year guarantee to single-family properties where, if a customer’s metered water charge is substantially higher than the flat water charge over the first 12 months, they would be eligible to receive a credit for the difference. The proposed Water Bylaw amendment extends the eligibility criteria to single-family properties with water meters installed through the Universal Single-Family Water Meter Program.

##### **Toilet Rebate Requirements**

The proposed Water Bylaw amendment includes the addition of WaterSense as an accepted toilet performance certification. WaterSense, which is a US Environmental Protection Agency (EPA) Program, ensures that products conform to water efficiency specifications.

The proposed bylaw amendment also revises the date-of-construction requirement for the dwelling submitting the toilet rebate application, in order to correspond with the last change in the BC Plumbing Code.

##### **Reduced Rate for Water Leaks on Private Property**

The current Water Bylaw provides a reduced rate for leaked water when a leak is promptly repaired by the property owner (within 96 hours). The reduced leak rate applies to a maximum of two consecutive billing quarters, where the water charge is determined based on average

historical usage at the regular rate, plus excessive usage at the leak rate. This fee adjustment occasionally results in hardship for the property owner, particularly when a leak is undetected until the meter is read, which could be up to three months later.

The proposed Water Bylaw amendment revises the fee adjustment by charging for consumption based only on average historical usage at the regular rate, for a maximum of two consecutive quarters. In addition, the proposed amendment expands the criteria from only underground leaks to all types of leaks, and increases the time for repairing the leak to 14 days.

### Sewer Bylaw Amendments

#### **Metered Sewer Charge Guarantee**

Sewer is charged based on water consumption for properties with water meters. The proposed Sewer Bylaw amendment includes the same water meter charge guarantee as the proposed Water Bylaw amendment.

#### **Reduced Rate for Water Leaks on Private Property**

The current Sewer Bylaw provides monetary relief to properties that have leaks by charging a reduced rate when a leak is promptly repaired by the property owner. The proposed revision to the sewer fee adjustment charges for consumption based only on average historical usage at the regular rate, for a maximum of two consecutive quarters. In addition, the proposed amendment expands the criteria from only underground leaks to all types of leaks, and increases the time for repairing the leak to 14 days.

#### **Drainage System Infrastructure Replacement Fee**

The proposed Sewer Bylaw amendment revises the drainage system infrastructure replacement fee to \$133.68, to correspond with the amount presented to Council at the November 25, 2013 Regular Council Meeting.

#### **Financial Impact**

None.

#### **Conclusion**

Amendment Bylaw No. 9099 proposes changes to Waterworks and Water Rates Bylaw No. 5637, and Amendment Bylaw No. 9101 proposes changes to the Drainage, Dyke and Sanitary Sewer System Bylaw No. 7551. These amendment bylaws include mandatory water metering for single-family dwellings, extending the eligibility criteria for the metered charge guarantee to

meters installed through the universal program, a new accepted performance certification for toilet rebates, revised fee adjustment for leaks on private property, and revised drainage system infrastructure replacement fee.



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Project Engineer  
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LB:jh



**Waterworks and Water Rates Bylaw No. 5637  
Amendment Bylaw No. 9099**

The Council of the City of Richmond enacts as follows:

1. The **Waterworks and Water Rates Bylaw No. 5637**, as amended, is further amended:

(a) by deleting sections 13(d) and substituting the following:

“(d) Every owner of a **one-family dwelling** or **two-family dwelling** which has a **water meter** installed:

(i) pursuant to section 14(b) or section 22A of this bylaw; or

(ii) as a consequence of a **City** infrastructure renewal program,

will receive a credit to be applied to future water charges equal to the difference between the metered charges for the first 12 months of consumption subsequent to the initial meter reading for billing purposes and the amount that would have been payable on a flat rate basis, provided:

(iii) the metered charges exceed the flat rate by more than \$10;

(iv) the **property owner** submits a request for the credit to the **City** in writing within 15 months of the initial metered billing start date; and

(v) there has been no change in ownership of the property.”

(b) by deleting section 14 and substituting the following:

“14. **Right to Substitute a Meter Service**

(a) The **General Manager, Engineering & Public Works** shall have the right at any time to substitute a meter service in lieu of an ordinary service to any premises.

(b) Commencing January 1, 2014, the **General Manager, Engineering & Public Works** shall establish a schedule for substituting a meter service in lieu of an ordinary service for all existing **one-family dwellings** in the **City** that do not have meter service, and the **City** will supply and install **water meters** at these **one-family dwellings** at no charge to the **property owner**.

(c) For **water meters** installed pursuant to section 14(a) or (b), meter rates will be payable from the time such meter is installed notwithstanding that the **customer** may have paid in advance a flat rate for the current year which has not expired, but a rebate of part of such advance payment proportionate to the unexpired part of the current year shall be credited and allowed to the **customer's** meter rate account for such meter service."

(c) by deleting subsection 22B(a)(i) and substituting the following:

"(i) the **dwelling unit** was constructed prior to October 3, 2011;"

(d) by deleting subsection 22B(a)(iii) and substituting the following:

"(iii) the replacement toilet is approved by the Canadian Standards Association (CSA), the Canadian Uniform Plumbing Code (CUPC), the Warnock Hersey (WH) Mark or WaterSense; and"

(e) by deleting sections 25A and substituting the following:

"25A. **Leaks**

Notwithstanding section 25, in the case of a leak in the **customer's waterworks**, if:

- (a) the **General Manager, Engineering & Public Works** is satisfied that the **customer** did not know or could not reasonably have known about the leak; and
- (b) the **customer** repairs the leak to the satisfaction of the **General Manager, Engineering & Public Works** within 14 days of the **customer's** discovery of the leak,

the **City** will charge the **customer** in accordance with section 25B below for both the billing period in which the leak was discovered and the previous billing period.

25B. **Leak Calculation**

- (a) When a **customer** qualifies under section 25A above, the **City** will determine the average amount of water recorded by the **water meter** per billing period for the **customer's** property over the last twelve months, or if that information is unavailable, by using the average for all users with the same type of property (as categorized in Schedule B or C, as applicable) over the past 12 months (the "**average amount**").
- (b) If the amount recorded by the **water meter** for the billing period in which the leak was discovered is greater than the **average amount**, or if the amount recorded by the **water meter** for the previous billing period is greater than the **average amount**, the **customer** will pay, for both the billing period in which the leak was discovered and the previous billing

period, the regular rate per cubic metre (in Schedule B or C, as applicable) for all amounts recorded up to the **average amount.**”

(c) Where the **General Manager, Engineering & Public Works** is satisfied that a **customer** was not notified of a leak until more than 30 days after the **City** became aware of the leak, the **customer** will pay the regular rate per cubic metre (in Schedule B or C, as applicable) for the period from the most recent billing until notification was provided, based on the **average amount** for that period.”

(f) by deleting the following from item 1 of Schedules B and C:

“Undetected leak rate per cubic meter (per section 25B of this bylaw) \$0.6996”

2. This Bylaw is cited as “**Waterworks And Water Rates Bylaw No. 5637, Amendment Bylaw No. 9099**”.

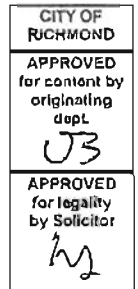
FIRST READING

SECOND READING

THIRD READING

ADOPTED

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MAYOR

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CORPORATE OFFICER



**Drainage, Dyke and Sanitary Sewer Bylaw No. 7551  
Amendment Bylaw No. 9101**

The Council of the City of Richmond enacts as follows:

1. The **Drainage, Dyke and Sanitary Sewer System Bylaw No. 7551**, as amended, is further amended:

- (a) by deleting section 2.1.2 and substituting the following:

“2.1.2 Every **property owner** whose property has been connected to the **City drainage system** must pay the **drainage system** infrastructure replacement fee of \$133.68 per property for the period January 1 to December 31 of each year.”

- (b) by adding the following after section 2.1.2:

“2.1.3 Every owner of a **one-family dwelling** or **two-family dwelling** which has a water meter installed:

- (a) pursuant to the universal or voluntary water metering program under section 14(b) or 22A of the *Waterworks and Water Rates Bylaw No. 5637*; or

- (b) as a consequence of a **City** infrastructure renewal program,

will receive a credit to be applied to future sewer charges equal to the difference between the metered charges for the first 12 months of consumption subsequent to the initial meter reading for billing purposes and the amount that would have been payable on a flat rate basis, provided:

- (c) the metered charges exceed the flat rate by more than \$10;

- (d) the **property owner** submits a request for the credit to the **City** in writing within 15 months of the initial metered billing start date; and

- (e) there has been no change in ownership of the property.”



(c) by deleting section 2.3A and substituting the following:

**“2.3A Leaks**

2.3A.1 In the case of a leak in a **metered property**'s waterworks, if:

- (a) the **General Manager, Engineering and Public Works** is satisfied that the **property owner** did not know or could not reasonably have known about the leak; and
- (b) the **property owner** repairs the leak to the satisfaction of the **General Manager, Engineering and Public Works** within 14 days of the **property owner**'s discovery of the leak,

the **City** will determine and charge **sanitary sewer** user fees in accordance with section 2.3A.2 for both the billing period in which the leak was discovered and the previous billing period.

2.3A.2 The following applies if a **metered property** qualifies under section 2.3.A.1 above:

- (a) The **City** will determine the average amount of water recorded for the **metered property** per billing period for the last twelve months, and if that information is unavailable, by using the average for the same type of property over the past 12 months (the “**average amount**”).
- (b) If the amount of water recorded for the **metered property** for the billing period in which the leak was discovered is greater than the **average amount**, or if the amount recorded for the **metered property** for the previous billing period is greater than the **average amount**, the **property owner** will pay the regular **sanitary sewer** metered rate specified in Part 2 of Schedule B for all amounts recorded up to the **average amount**.”

(d) by deleting the following from item 2 of Schedule B:

“Underground leak rate per cubic metre of water exceeding  
**average amount** (as defined in Section 2.3A.2(a)): \$ 0.8577”

2. This Bylaw is cited as "Drainage, Dyke and Sanitary Sewer Bylaw No. 7551, Amendment Bylaw No. 9101".

FIRST READING

SECOND READING

THIRD READING

ADOPTED

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CITY OF RICHMOND
APPROVED for content by originating dept. 53
APPROVED for legality by Solicitor M

\_\_\_\_\_  
MAYOR

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CORPORATE OFFICER