

**NOVA SCOTIA UTILITY AND REVIEW BOARD****IN THE MATTER OF THE PUBLIC UTILITIES ACT**

- and -

**IN THE MATTER OF AN APPLICATION** by the **HALIFAX REGIONAL WATER COMMISSION** for approval of a capital project to install Automated Meter Infrastructure and approval of amendments to the Regulations respecting rates and charges for the provision of water, public and private fire protection, and wastewater services to support the project

**BEFORE:**  Peter W. Gurnham, Q.C., Chair

**ORDER**

**WHEREAS** the Halifax Regional Water Commission (“HRWC”) made application on May 12, 2016, to the Nova Scotia Utility and Review Board (“Board”) for approval of a capital project to install Automated Meter Infrastructure (“AMI”) and approval of amendments to the *Regulations* respecting the rates and charges for the provision of service to support the AMI project;

**AND WHEREAS** the Board determined this would be reviewed in a paper hearing, and issued an Order dated May 25, 2016, setting out the timetable;

**AND WHEREAS** the Board issued Information Requests (“IRs”) to HRWC on June 15, 2016, to which responses were received on July 6, 2016;

**AND WHEREAS** the Board received one letter of comment from the Canadian Union of Public Employees (“CUPE”) on July 20, 2016, to which HRWC provided a response in a letter to the Board dated August 3, 2016;

**AND WHEREAS** the only intervenor in the proceeding, the Consumer Advocate, outlined his concerns in a letter to the Board dated August 25, 2016, to which HRWC provided a response in a letter to the Board dated August 31, 2016;

**AND WHEREAS** the Board issued a letter to HRWC dated August 10, 2016, which requested further clarification of the cost justification for the AMI project, to which HRWC provided a response in a letter to the Board dated August 25, 2016;

**AND WHEREAS** after reviewing the information filed, the Board issued a letter Decision dated October 6, 2016, which approved the capital project, and the proposed changes to the *Regulations*, with the corrections identified in the responses to the IRs, with the exception of proposed *Regulation 45A(2)*, noting:

The Board does not approve the addition of *Regulation 45A(2)* as proposed, which sets out a \$50 charge for manual meter reads in cases where the customer refuses to permit the installation of an AMI meter. The Board approves the charge for new HRWC customers only, but the charge should not be applied to existing customers, for the reasons outlined above. The Board is prepared to revisit this issue as a part of HRWC's next general rate application.


**AND WHEREAS** the Board's letter dated October 6, 2016, directed HRWC to file the Schedule of Regulations with the approved changes as a Compliance Filing;

**AND WHEREAS** HRWC filed the Compliance Filing in correspondence to the Board dated October 13, 2016;

**AND WHEREAS** the Board reviewed the Compliance Filing;

**IT IS HEREBY ORDERED** that that the Schedule of Rates, Rules and Regulations for Water, Wastewater and Stormwater Services, as amended, and attached hereto, be approved, effective October 26, 2016;

**DATED** at Halifax, Nova Scotia, this 26<sup>th</sup> day of October, 2016.

  
\_\_\_\_\_  
Clerk of the Board

*RM*

**SCHEDULE OF RATES, RULES & REGULATIONS**  
**FOR WATER, WASTEWATER, AND STORMWATER SERVICES**

As Amended, October 26, 2016

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Stormwater, Public and Private Fire Protection Service, made by Order of the Nova Scotia  
Utility and Review Board effective May 1, 2015  
(as amended, October 26, 2016)**

**PART I - INTERPRETATION**

**Short Title**

1. These regulations may be cited as the “Halifax Regional Water Commission Regulations”.

**Adoption of Statutory Definitions**

2. All terms defined in the Halifax Regional Water Commission Act have the same meaning in these Regulations, unless otherwise defined.

**Definitions**

3. In these Regulations,
  - a1) “Automated Meter Infrastructure (AMI)” means a system for measuring individual Customer’s water consumption at intervals of an hour or less and communicating such information at frequent intervals to the Commission.
  - a) "Accredited Laboratory" means any laboratory accredited by an authorized accreditation body in accordance with a standard based on "CAN-P-1585: Requirements for the Accreditation of Environmental Testing Laboratories" established by the Standards Council of Canada, as amended, or "ISO/IEC/EN 17025: General Requirements for Competence of Calibration and Testing Laboratories" established by the International Organization for Standardization, as amended;
  - b) "Adverse Effect" means an effect that impairs or damages the environment, including an adverse effect respecting the health of humans or the reasonable enjoyment of life or property;
  - c) "Best Management Practices (BMP)" means an integrated plan to control and reduce the Release of restricted and prohibited substances into Wastewater or Stormwater Systems to a practicable extent, through methods including physical controls, pretreatment processes, operational procedures and staff training;
  - d) "Biochemical Oxygen Demand (BOD)" means the five-day BOD being the determination of the molecular oxygen utilized during a five-day incubation period for the biochemical degradation of organic material (carbonaceous demand), and the oxygen used to oxidize inorganic material, including sulphides and ferrous iron, and the amount of oxygen used to oxidize reduced forms of nitrogen (nitrogenous demand) as determined by the applicable procedure in Standard Methods;
  - e) "Biosolids" means an organic, stabilized material produced during the treatment of domestic Wastewater and septage sludge which has undergone treatment to reduce



pathogen content;

- f) "Blow Down" means the Discharge of recirculating Non-contact Cooling Water for the purpose of discharging materials contained in the water;
- g) "Chemical Oxygen Demand (COD)" means a measure of the capacity of water to consume oxygen as a result of oxidation of inorganic chemicals and decomposition of organic matter;
- h) "Combined Sewer" means a sewer intended to function simultaneously as a Stormwater and a Wastewater sewer;
- i) "Combustible Liquid" means a liquid that has a flash point not less than 37.8 degrees Celsius and not greater than 93.3 degrees Celsius;
- j) "Composite Sample" means a volume of Wastewater, Stormwater, Uncontaminated Water, or effluent made up of three or more Grab Samples that have been combined automatically or manually and taken at intervals during the sampling periods;
- k) "Customer" means a person who arranges to be or is supplied with water and/or Wastewater Service at a specified location or locations and includes a person receiving Stormwater Service;
- l) "Discharge" means to directly or indirectly discharge, Release, permit or cause to be discharged or Released into Wastewater or Stormwater Systems;
- m) "Discharger" means an owner, occupant or person who has charge, management or control of effluent, Wastewater, Stormwater, Uncontaminated Water or any combination thereof, which is Discharged to Wastewater or Stormwater Systems;
- n) "Ditch" means an excavated or constructed open channel, which is vested in or under the control of the Commission;
- o) "Dwelling Unit" means the whole or any part of a building or structure that is kept or occupied as a permanent or temporary residence and includes (i) a building within the curtilage of a Dwelling Unit that is connected to it by a doorway or by a covered and enclosed passage-way, and (ii) a unit that is designed to be mobile and to be used as a permanent or temporary residence, regardless of whether it is being used as such a residence;
- p) "Extraneous Water or Wastewater" means water or Wastewater originating from a source other than the Commission's water supply, but does not include water originating from private wells for domestic use where a connection to the Commission's Water System is not available;
- q) "Extra Strength Wastewater" means Wastewater Released to a sewer that is higher in concentration for one or more constituent concentrations than those set out in Table 6 in these Regulations;
- r) "Fuel" includes alcohol, gasoline, naphtha, diesel fuel, fuel oil or any other ignitable

substance intended for use as a fuel;

- s) "Grab Sample" means a volume of Wastewater, Stormwater, Uncontaminated Water or effluent which is collected over a period not exceeding 15 minutes;
- t) "Hauled Waste" means any Waste, including Hauled Wastewater, which is transported to and deposited into, or proposed to be deposited into, any location in a Wastewater or Stormwater System;
- u) "Hauled Wastewater" means Waste removed from a Wastewater facility, including a cesspool, a septic tank, a vault privy or pit privy, a chemical toilet, a portable toilet or a Wastewater holding tank;
- v) "Hazardous Substance" means:
  - i) any substance or mixture of substances, other than a Pesticide, that exhibits characteristics of flammability, corrosivity, reactivity or toxicity; and
  - ii) any substance that is designated as a hazardous substance within the meaning of any applicable provincial or federal legislation, as amended from time to time;
- w) "Hazardous Waste" means any Hazardous Substance disposed of as Waste;
- x) "HRM" means the Halifax Regional Municipality;
- y) "Ignitable Waste" means a substance that:
  - i) is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 93 degrees Celsius, as determined by the Tag Closed Cup Tester (ASTM D-56-97a), the Setaflash Closed Cup Tester (ASTM D-3828-97 or ASTM D-3278-96e1), the PenskyMartens Closed Cup Tester (ASTM D-93-97), or as determined by an equivalent test method;
  - ii) is a solid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a danger;
  - iii) is an ignitable compressed gas as defined in regulations made under applicable provincial or federal legislation, as amended; or
  - iv) is an oxidizing substance as defined in regulations made under applicable provincial or federal legislation, as amended;
- z) "Impervious Area" means an area or surface which prevents or limits the entrance or passage of stormwater, including asphalt, concrete, bricks, roofs and gravel surfaces if they are hard packed, and all of which are denoted as impervious by the satellite imagery utilized by the Commission in that determination;
- aa) "Industrial, Commercial or Institutional" includes or pertains to industry, manufacturing, commerce, trade, business, or institutions and includes multi-unit dwellings of four or more units;

- bb) "Infrastructure Charge" means a development charge levied as a condition of subdivision approval or at a building permit stage;
- cc) "Interceptor" means a receptacle that is installed to prevent oil, grease, sand or other materials from passing into a Wastewater System or a Stormwater System;
- dd) "Leachate" includes any liquid that has percolated through solid waste and, during percolation, has extracted dissolved or suspended materials from such solid waste, including the liquid produced from the decomposition of waste materials and liquid that has entered the waste material from external sources including surface drainage, rainfall and groundwater;
- ee) "Non-contact Cooling Water" means water that is used in a process for the purpose of removing heat and that has not, by design, come into contact with any raw material, intermediate product, waste product, or finished product, but does not include Blow Down water;
- ff) "NORM" means naturally occurring radioactive material found in industrial wastes or by-products enriched with radioactive elements found in the environment, including uranium, thorium and potassium and any of their decay products, including radium and radon;
- gg) "Monitoring Access Point" means an access point, including a chamber, in a Wastewater or Stormwater Service Connection to allow for observation, sampling and flow measurement of the Wastewater, Uncontaminated Water or Stormwater within such a Service Connection;
- hh) "Pathological Waste" includes fluids or materials which may contain pathogens of human or animal origin;
- ii) "PCBs" means any monochlorinated or polychlorinated biphenyls or any mixture of them or a mixture that contains one or more of them;
- jj) "Pesticides" includes any substance that is a pest control product within the meaning of the "Pest Control Products Act" (Canada) or a fertilizer within the meaning of the "Fertilizers Act" (Canada) and that contains a pest control product;
- kk) "Phenolic Compounds" means hydroxyl derivatives of benzene and its condensed nuclei;
- ll) "Pretreatment Facility" means Wastewater treatment processes designed to remove pollutants from Wastewater prior to Discharge to the Commission's Wastewater System;
- mm) "Reactive Waste" means a substance that:
  - i) is normally unstable and readily undergoes violent changes without detonating;
  - ii) reacts violently with water;
  - iii) forms potentially explosive mixtures with water;

- iv) when mixed with water, generates toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment;
- v) is a cyanide or sulphide bearing Waste which, when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment;
- vi) is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement;
- vii) is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or
- viii) is an explosive (Class 1) as defined in the Explosives Regulations, C.R.C., c. 599, as amended from time to time;
- nn) "Regular Working Hours" means any time between the hours of eight o'clock in the forenoon and four o'clock in the afternoon on any day which is not a Saturday, a Sunday or a holiday, as that term is defined in the Interpretation Act;
- oo) "Release" means a substance that has spilled, leaked, seeped, drained, sprayed, emptied or has been emitted, Released, Discharged, disposed of, injected, inoculated, abandoned, deposited, poured, thrown, dumped, pumped, exhausted or placed in the environment or the Water, Wastewater or Stormwater System;
- pp) "Service" means water Service, Wastewater Service or Stormwater Service or any combination of each of them;
- qq) "Service Connection" means Water Service Connection, Wastewater Service Connection, or Stormwater Service Connection, or any combination of each of them;
- rr) "Solvent Extractable Matter" includes grease or oils from animal, vegetable, mineral or synthetic sources;
- ss) "Standard Methods" means *Standard Methods for the Examination of Water and Wastewater* (the edition current at the time of testing), published jointly from time to time by the American Public Health Association, the American Water Works Association and the Water Environment Federation;
- tt) "Stormwater" means water from precipitation of all kinds, and includes water from the melting of snow and ice, groundwater discharge and surface water;
- uu) "Stormwater Service Connection" includes a piping system that conveys Stormwater from a property to a Stormwater System;
- vv) "Stormwater System" means a system carrying Stormwater and vested in or under the control of the Commission;
- ww) "Suspended Solids" means the insoluble matter suspended in Wastewater or Stormwater that is separable by laboratory filtration;

- xx) "Total Kjeldahl Nitrogen" means the sum of organic nitrogen and ammonia nitrogen;
- yy) "PAHs" means the total of all of the following polycyclic aromatic hydrocarbons:  
 Acenaphthene, acenaphthylene, anthracene, benza(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysenes, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, methylnaphthanthene, naphthalene, phenanthrene, pyrene;
- zz) "Toxic Substance" means any substance defined as toxic under the *Canadian Environmental Protection Act 1999*, as amended from time to time;
- aaa) "Uncontaminated Water" means potable water or any other water to which no matter has been added as a consequence of its use;
- bbb) "Waste" means a substance that would cause or tend to cause an Adverse Effect if added to the environment, or the Water, Wastewater or Stormwater System, and includes rubbish, slimes, tailings, or other industrial wastes, effluent, sludge, Wastewater, garbage, refuse, scrap, litter or other waste products of any kind;
- ccc) "Waste Radioactive Substances" includes uranium, thorium, plutonium, neptunium, deuterium, their respective derivatives and compounds and such other substances as the Atomic Energy Control Board (Canada) may designate from time to time as being capable of releasing ionizing radiation;
- ddd) "Wastewater" means liquid waste containing animal, vegetable, mineral or chemical matter as well as water from sanitary appliances that contains human fecal matter or human urine in solution or suspension together with such groundwater, surface water or Stormwater as may be present;
- eee) "Wastewater Service Connection" means a piping system that conveys Wastewater from a property to a Wastewater System;
- fff) "Wastewater System" means the structures, pipes, devices, equipment, processes and related equipment used, or intended to be used, for the collection, transportation, pumping or treatment of Wastewater and disposal of effluent, which are vested in or under the control of the Commission;
- ggg) "Water System" means the source, structures, pipes, hydrants, meters, devices, equipment or other things used, or intended to be used, for the collection, transportation, pumping or treatment of water, and which are vested in or under the control of the Commission;
- hhh) "Water Service Connection" means a piping system that conveys water from a water main to a property;
- iii) "Watercourse" means:
  - (a) the bed and shore of every river, stream, lake, creek, pond, spring, lagoon or other natural body of water, and the water therein, within the jurisdiction of the Province, whether it contains water or not; and

(b) all ground water.

**Interpretation**

4.(1) These Regulations shall be interpreted in accordance with the principles for the interpretation of legislation.

(2) The *Interpretation Act* (Nova Scotia) applies to these Regulations, except where a contrary intention appears.

## PART II - RATES

### Rates for Water Service

- 5.(1) Bills for water Service, other than for a specific one time Service, shall be issued on a monthly or quarterly basis and shall be comprised of a base rate and a consumption rate, each applicable as follows;

(a) Table 1. Base Rate for Water Service on or after May 1, 2015

Size of Meter (mm)	Minimum Water Monthly Bill	Minimum Water Quarterly Bill
15	\$13.00	\$39.00
20	\$18.00	\$54.00
25	\$29.00	\$87.00
40	\$55.00	\$165.00
50	\$85.00	\$255.00
80	\$170.00	\$510.00
100	\$264.00	\$792.00
150	\$527.00	\$1,581.00
200	\$946.00	\$2,838.00
250	\$1575.00	\$4,725.00

Base Rate for Water Service on or after April 1, 2016

Size of Meter (mm)	Minimum Water Monthly Bill	Minimum Water Quarterly Bill
15	\$13.00	\$39.00
20	\$18.00	\$54.00
25	\$29.00	\$87.00
40	\$55.00	\$165.00
50	\$85.00	\$255.00
80	\$170.00	\$510.00
100	\$264.00	\$792.00
150	\$527.00	\$1,581.00
200	\$946.00	\$2,838.00
250	\$1,575.00	\$4,725.00

### (b) Consumption Rate

The consumption rate for water is: \$0.845 / m<sup>3</sup> for water sold on or after May 1, 2015, and \$0.976 / m<sup>3</sup> for water sold on or after April 1, 2016.

- (2) Non-metered Customers will be charged the approved base water rate and the consumption rate for an equivalent size meter, as estimated by the Commission based on the best information available to the Commission.

Table 2. Non-metered Service Rates

Service on or after May 1, 2015:

	Monthly Bill	Quarterly Bill
(15 mm) 164 m <sup>3</sup> /year (Domestic)	\$25.00	\$75.00
(20 mm) 566 m <sup>3</sup> /year	\$58.00	\$174.00
(25 mm) 1102 m <sup>3</sup> /year	\$107.00	\$321.00

Service on or after April 1, 2016:

	Monthly Bill	Quarterly Bill
(15 mm) 158 m <sup>3</sup> /year (Domestic)	\$26.00	\$78.00
(20 mm) 541 m <sup>3</sup> /year	\$63.00	\$189.00
(25 mm) 1061 m <sup>3</sup> /year	\$116.00	\$348.00

Rates for Wastewater Service

6.(1) Bills for Wastewater Service, other than those charges for a specific one time Service shall be issued on a monthly or quarterly basis and shall be comprised of a base rate and a volumetric rate, each applicable as follows;

(a) Table 3. Base Rate for Wastewater Service on or after May 1, 2015

Size of Meter (mm)	Minimum WW Monthly Bill	Minimum WW Quarterly Bill
15	\$13.00	\$39.00
20	\$19.00	\$57.00
25	\$32.00	\$96.00
40	\$63.00	\$189.00
50	\$101.00	\$303.00
80	\$203.00	\$609.00
100	\$317.00	\$951.00
150	\$634.00	\$1,902.00
200	\$1,142.00	\$3,426.00
250	\$1,903.00	\$5,709.00



Base Rate for Wastewater Service on or after April 1, 2016

Size of Meter (mm)	Minimum WW Monthly Bill	Minimum WW Quarterly Bill
15	\$14.00	\$42.00
20	\$20.00	\$60.00
25	\$33.00	\$99.00
40	\$64.00	\$192.00
50	\$103.00	\$309.00
80	\$206.00	\$618.00
100	\$321.00	\$963.00
150	\$641.00	\$1,923.00
200	\$1,154.00	\$3,462.00
250	\$1,923.00	\$5,769.00

(b) Wastewater Discharge Rate

The Discharge rate for all Wastewater Discharged to the Wastewater System is: \$1.638 / m<sup>3</sup> for Wastewater Discharged on or after May 1, 2015, and \$1.753/ m<sup>3</sup> for Wastewater Discharged on or after April 1, 2016.

- (2) Non-metered Customers will be charged the approved Wastewater base charge and the consumption Discharge rate for an equivalent size meter, as determined by the Commission and based on the projected usage of the customer, as estimated by the Commission based on the best information available to the Commission, including comparison with other similar customers and/or the use of private meters.

Table 4. Non-metered Service Rates

Service on or after May 1, 2015:

	Monthly Bill	Quarterly Bill
(15 mm) 171 m <sup>3</sup> /year (Domestic)	\$37.00	\$111.00
(20 mm) 564 m <sup>3</sup> /year	\$96.00	\$288.00
(25 mm) 1086 m <sup>3</sup> /year	\$181.00	\$543.00

Service on or after April 1, 2016:

	Monthly Bill	Quarterly Bill
(15 mm) 164 m <sup>3</sup> /year (Domestic)	\$38.00	\$114.00
(20 mm) 539 m <sup>3</sup> /year	\$99.00	\$297.00
(25 mm) 1046 m <sup>3</sup> /year	\$186.00	\$558.00

- (3) Despite subsections (1) and (2), where a Customer is discharging Wastewater from sources other than the Commission's system, or where a Customer may be discharging Stormwater into the Wastewater System, or where, in the opinion of the Commission, a

Discharge into the Wastewater System by a Customer may not be accurately reflected by use of a similar size and class of Customer water meter, the Commission may require a Customer in any such circumstances to measure actual Discharge in a manner approved by the Commission, in which case the volumetric charge will be based on the actual measured Discharge into the Commission's Wastewater System.

#### Rates for Stormwater Service

- 7.(1) Bills for Stormwater Service, other than those charges for a specific one time Service, shall be issued on a semi-annual or annual basis, and levied based on Impervious Area.
- (2) Effective July 1, 2013 HRM shall pay annually to the Commission for the fiscal year commencing April 1, 2013, for Stormwater Service associated with the HRM owned Street Right of Way (ROW) the amount of \$3,561,766, which amount is pro-rated from July 1, 2013 to be \$2,671,324 and calculated based on the Impervious Area within the HRM owned ROW.  
  
Effective April 1, 2014 HRM shall pay annually to the Commission for Stormwater Service associated with the HRM owned Street Right of Way (ROW) the amount of \$3,881,408.
- (3) Non-Residential customers shall pay a Site Generated Flow Rate of \$0.133 per m<sup>2</sup> of Impervious Area on and after July 1, 2013, and \$0.149 / per m<sup>2</sup> of Impervious Area on and after April 1, 2014, Impervious Area being measured through satellite imagery.
- (4) Residential customers shall pay a uniform charge of \$29.86 for 2013/14 pro-rated to begin effective July 1, 2013 together with a uniform charge of \$33.39 in 2014/15, which uniform charge shall be based on average Impervious Area for Residential properties, as calculated from satellite imagery.
- (5) Properties that are within the Commission's service area that do not receive Stormwater Service from the Commission will be exempt from the Site-Generated Flow portion of the charge.
- (6) Any person who objects to not being exempt from the Site-Generated Flow portion of the charge under subsection (5) may file a notice with the Commission setting out the reasons for the objection and the relevant facts on which that person relies, such Notice of Objection to be accepted by the Commission by way of email, letter, facsimile, telephone or in person.
- (7) On receipt of a Notice of Objection the Commission shall, with all due dispatch, vary or confirm, in writing, its original decision, the onus being on the Commission to show, based on engineering or other evidence, that the property in question receives Stormwater Service.
- (8) Any person who disputes a decision of the Commission under subsection (7) may refer the matter to the Board for resolution.

#### Charge for Temporary Water, Wastewater or Stormwater Service

- 8.(1) The Commission may furnish water, Wastewater or Stormwater Service to persons requiring temporary Service for construction of buildings or other work.

- (2) Persons referred to in subsection (1) who require water Service shall deposit with the Commission such sum as may be determined by the Commission as being sufficient to defray the cost of making the necessary connection to the Services provided, together with the cost of the meter to be installed to measure the water consumed.
- (3) Upon completion of the work referred to in subsection (2) and the return to the Commission of the undamaged meter, the Commission shall refund the deposit referred to in subsection (2) after payment for the Services provided and the Commission's determination of connection or disconnection charges calculated based on the time and materials used in providing the Service, together with the meter base charge and the consumption and/or Discharge rates in respect of such Service installation.
- (4) The Commission may approve the temporary Discharge of Wastewater or Stormwater to the Wastewater or Stormwater Systems, upon such terms and conditions as the Commission determines appropriate in the circumstances, such temporary Discharges to be subject to the Discharge rate approved by these Regulations.
- (5) Costs incurred by the Commission to sample, analyze, monitor or inspect a temporary Discharge may be charged to and recovered from the person to whom permission to Discharge has been given.

#### New Water, Wastewater or Stormwater Account Charge

9. The Commission shall charge \$25.00 for the creation of a water, Wastewater, or Stormwater account.

### **PART III - BILLING**

#### Payment of Bills

- 10.(1) Bills for Service issued by the Commission to Customers shall be payable on the date indicated thereon and will provide as follows:
  - (a) Bills issued on a quarterly basis and which are not paid within 30 days after the billing date shall be subject to an interest charge of 1.5% per month or part thereof, or a maximum of 19.56% per annum, such amount being due and payable within such 30 day period, and the effective date of the interest charge shall be clearly shown on the bill.
  - (b) Bills issued on a monthly basis and which are not paid within 25 days after the billing date shall be subject to an interest charge of 1.5% per month or part thereof, or a maximum of 19.56% per annum, such amount being due and payable within such 25 day period, and the effective date of the interest charge shall be clearly shown on the bill.
  - (c) Bills may be issued annually and if not paid within 30 days after the billing date shall be subject to an interest charge of 1.5% per month or part thereof, or a maximum of 19.56% per annum, such amount being due and payable within such 30 day period and the effective date of the interest charge shall be clearly shown on the bill.

### Adjustment of Bills

- 11.(1) Any Customer desiring to question their bill shall do so in writing within two years from the date shown on such bill.
  - (2) In the event the Commission determines it is necessary to make a billing adjustment as a result of a Customer being under-billed, such adjustment shall be retroactive for a maximum of four billing periods or one year, whichever is longer.
  - (3) Despite subsection (2), in the event that a billing adjustment is the result of the Customer's unauthorized connection to the Water, Wastewater or Stormwater System or willful interference with or damage to metering equipment, the Customer shall be responsible for all payments of such accounts from the date such unauthorized connection to water Service or interference with meter equipment occurred.
  - (4) In the event the Commission determines it is necessary to make a billing adjustment as a result of a Customer being over-billed, such adjustment will be estimated by the Commission, and, based upon such estimate, the Commission will pay to such Customer the overbilled amount together with interest calculated as simple interest paid on savings accounts by deposit taking banks listed in Schedule I of the Bank Act (Canada), during the period which the Customer was over-billed by the Commission, such period not to exceed two years.
  - (5) If a water meter security seal is broken or if a meter does not register correctly or has been removed without the Commission's authorization, the charge for water, and Wastewater Service shall be estimated in accordance with the best data available to the Commission, provided that if the subject premises are unmetered or a non-user of the Commission's Water System, then the charge for Service will be estimated in accordance with the best available data to the Commission.
  - (6) In the event a customer has been billed in error for a Service they did not receive, the Commission will reimburse such customer the amount billed to and paid by the customer, together with interest calculated as simple interest paid on savings accounts by deposit taking banks listed in Schedule I of the Bank Act (Canada), respecting the period during which the customer was incorrectly billed by the Commission, such period not to exceed five years.

### Estimated Reading for Billing Customers

- 12.(1) The Commission may estimate a meter reading provided that under no circumstances will an estimated reading be used for more than three consecutive billing periods.
  - (2) In the event an estimated bill is utilized by the Commission for three consecutive billing periods, the Commission shall make every reasonable effort to obtain a meter reading.
  - (3) For the purposes of subsection (2), if entry to the property on which such meter is located is required, the Commission shall notify the Customer by first class mail and undertake its reasonable efforts to obtain a reading, and failing such arrangements being made despite

its reasonable efforts, the Commission may suspend Service until arrangements are made with the Customer for the Commission to obtain a reading of such meter.

- (4) When a meter reading referred to in subsection (3) has been obtained, any previously estimated bill or bills provided in respect of Service measured by such meter shall be adjusted by the Commission if required by its reconciliation of metered Service data to previously estimated Service.

#### Suspension or Refusal of Service

- 13.(1) The Commission shall have the right to suspend Service to a Customer whose water, Wastewater or Stormwater account remains unpaid for more than 40 days.
  - (2) With respect to water, Wastewater and Stormwater accounts referred to in subsection (1), unpaid balances will be transferred to HRM with a request from the Commission that they be registered as a lien against the property to which Service has been provided and in respect of which such accounts have been rendered as evidence of such Service.
  - (3) In the event of a violation of these Regulations by a person or Customer, including liabilities and obligations owed to the Commission by any Customer under a private contract for Services entered into between the Commission and such Customer, the Commission may refuse or immediately suspend Service to such Customer, and may continue such refusal or suspension until the violation has been cured.

#### Collection of Overdue Bills

14. The Commission may charge a \$35.00 fee for each visit by Commission staff to a Customer whose payment is overdue, if in the opinion of the Commission, such fee is warranted.

#### Customer Bill Retrievals / Copies

15. The Commission shall charge a fee of \$12.00 per copy for water, Wastewater, and/or Stormwater bill retrievals or copies issued to Customers outside the Customer's regular billing cycle.

#### Dishonoured Payments

16. The Commission shall charge a \$25.00 fee plus bank charges for cheques or pre-authorized payments that have been dishonoured by the Customer's bank or other financial institution.

#### Deposits

- 17.(1) The Commission may require an applicant for water, Wastewater and/or Stormwater Service to deposit with the Commission a sum equal to the estimated charges for six months of Service, which deposit shall be held by the Commission as security for the

payment of the applicant's bills as a Customer of the Commission.

- (2) When a Customer referred to in subsection (1) ceases to be a Customer, a deposit paid in accordance with subsection (1) shall be returned to the Customer with interest thereon at the simple interest rate than being paid on savings accounts by the Commission's chartered bank.

#### **PART IV - CHARGES**

##### Connection/Disconnection of Service

- 18.(1) The Commission shall charge \$55.00 for a connection or disconnection of Service during Regular Working Hours, which charge shall be \$210.00 for a connection or disconnection of Service outside Regular Working Hours.
  - (2) When water, Wastewater, or Stormwater Service has been suspended for any violation of these Regulations, such Service shall not be re-established until a connection charge has been paid.
  - (3) Despite subsections (1) and (2), where suspension of Service is for non-payment only, the fees set out therein respecting connection or disconnection of Service during Regular Working Hours do not apply in respect of one disconnection and one connection of Service every year, or in any 12 month period.

##### Water Meter Installation

- 19.(1) The Commission shall charge \$55.00 for the installation of a meter in a Customer's premises during Regular Working Hours for a meter size up to and including 25 mm, in a meter setting specified by the Commission and provided by the Customer unless the meter installation is initiated by the Commission as part of an implementation of AMI or other technology, in which case no charge will be applied.
  - (2) Installation of a meter referred to in subsection (1) which takes place outside of Regular Working Hours shall be subject to a charge of \$210.00, unless the meter installation is initiated by the Commission as part of an implementation of AMI or other technology change, in which case no charge will be applied.
  - (3) In respect of the installation by the Commission of meters of a meter size of 40 mm or larger in a Customer's premises in a meter setting specified by the Commission and provided by the Customer, such charge shall be calculated based on the Commission's determination of any difficulties or challenges it encountered in carrying out such installation including access to the location of the meter.

##### Customer Monitoring Service

- 20.(1) The Commission may enter into an agreement with a Customer to monitor the metered

flow of Service to the Customer and to provide the Customer access to the data generated by such monitoring.

- (2) The cost of providing the monitoring referred to in subsection (1) will be charged to the Customer at the rate of \$120.00 per month per meter, and billed to the Customer monthly.

#### Inspection of Service Connections and Driveway Culverts

- 21.(1) The Commission shall require all Water, Wastewater and Stormwater Service Connections, including renewals and repairs, to be inspected by the Commission prior to activation of such water, Wastewater or Stormwater Service, subject to the following fees:
  - (a) for Water Service Connections up to and including 50 mm in diameter the fee shall be \$90.00 per inspection visit, and \$165.00 for Water Service Connections greater than 50 mm in diameter.
  - (b) for Wastewater or Stormwater Service Connections up to 150 mm in diameter the fee shall be \$90.00 per inspection visit, and \$165.00 for Wastewater or Stormwater Service Connections 150 mm or greater in diameter.
  - (c) where multiple Service Connections are inspected within the same inspection visit, only one fee shall apply and it shall be the higher of the applicable fees.
- (2) Driveway culverts inspected by the Commission shall be subject to a fee of \$90.00 per inspection visit.

#### Wastewater Rebate

- 22.(1) A Customer who uses more than 1,000 m<sup>3</sup> of water in a one year period is eligible for a wastewater rebate if they can demonstrate to the satisfaction of the Commission that the volume of Wastewater Discharged by the Customer into the Commission's Wastewater System is less than the volume of water used by the Customer.
- (2) Upon application for a rebate referred to in subsection (1) being made by a Customer to the Commission, a rebate of the Wastewater Discharge Charge attributable to the difference between the amount of the water used and the amount of Wastewater Discharged to the Commission's Wastewater System shall be paid to the Customer.
- (3) The rebate referred to in subsection (1) does not apply to the Wastewater Discharge Base Charge nor to leakage or wastage from a metered water supply.
- (4) Application for a rebate under subsection (1) shall be made annually by a Customer to the Commission, together with such documentation required by the Commission in support of such application for rebate, such application to be submitted to the Commission no later than 6 months after the year in respect of which the application for rebate is made.

### Extra Strength Wastewater Surcharge

23.(1) The Commission may grant approval to a user of a Wastewater System to Discharge Extra Strength Wastewater into the Commission's Wastewater System as set out in Section 65 of these Regulations.

(2) The approval referred to in subsection (1) shall include an Extra Strength Wastewater surcharge that shall be established by the Commission as set out in Attachment 2 to these Regulations, which surcharge shall be in addition to an approved wastewater Discharge rate and which surcharge shall be in addition to the monthly or quarterly Wastewater bill of the Customer, as the case may be.

The Extra Strength Wastewater surcharge rates are as follows:

Effective May 1, 2015: BOD: \$1.0545 per kg and Suspended Solids: \$0.8959 per kg

Effective April 1, 2016: BOD: \$1.0951 per kg and Suspended Solids: \$0.9273 per kg

### Audit Inspections and Review of Drawings

24(1). The Commission shall levy a charge pursuant to a services agreement with any person requesting a review of final design drawings for additions or extensions to the Commission's system, at the following rates:

- |     |                                   |                         |
|-----|-----------------------------------|-------------------------|
| (a) | Water Mains                       | \$1.24 per linear metre |
| (b) | Wastewater Mains                  | \$1.24 per linear metre |
| (c) | Stormwater Mains/Ditches/Culverts | \$1.24 per linear metre |

(2) The charges referred to in subsection (1) are due upon receipt by the Commission of a signed service agreement with the counterparty to such agreement.

(3) The Commission will undertake audit inspections of Water, Wastewater and Stormwater Systems in respect of an extension of Commission infrastructure resulting from a subdivision application by an applicant to HRM or in support of a new Service Connection, such audit inspection fee being equal to 2% of the estimate of the construction cost of the project to which such systems relate.

(4) Fees referred to in subsection (3) which are in respect of an extension of Service incorporated in a subdivision application to HRM shall be remitted to HRM.

(5) In the event the Commission incurs costs more than or less than the estimated 2% described in subsection (3), an amount equal to the difference between such estimated 2% and actual cost incurred shall be payable to the Commission or reimbursed to the payor of such estimated cost, as the case may be.



Missed Appointment by Customer

25.(1) Where the Commission makes an appointment with a Customer respecting:

- (a) a Water, Wastewater, and/or Stormwater Service Connection;
- (b) the installation of a water meter;
- (c) water turned on or off to a property;
- (d) a Service related visit requested by the Commission; or
- (e) a Customer's request to have the Commission visit a property,

and the Customer fails to keep or permit such appointment or the required plumbing is not completed to allow for the installation of a water meter, the Commission shall levy a charge of \$45.00 for each missed appointment.

- (2) Where the Commission fails to keep an appointment with a Customer under subsection (1), the Commission shall credit the customer's account in the amount of \$45.00 for each missed appointment.
- (3) Despite subsection (2), the \$45.00 charge referred to therein shall not apply in respect of an appointment with a Customer related to an implementation of AMI.

Theft of Service

26. The Commission may impose penalties in addition to charges for Service approved by these Regulations for each unauthorized Water, Wastewater, and/or Stormwater Service Connection, as follows:

1 <sup>st</sup> incident	\$300.00
2 <sup>nd</sup> incident	\$750.00

Designated Bulk Fill Station

27.(1) The Commission may permit access to bulk fill water stations in accordance with the fees, consumption rates and access card use as follows,

- (a) annual designated bulk fill station permit fee:

an annual permit fee will be charged for each vehicle equipped for access to the bulk fill stations, as follows:

- (i) first Vehicle - \$225.00
- (ii) each Additional Vehicle - \$20.00

(b) consumption rates:

consumption rates for water accessed through the bulk fill stations will be \$2.08 per cubic metre effective May 1, 2015 and \$2.24 effective April 1, 2016.

(c) access Cards:

- (i) bulk water access cards will be pre-loaded in specific dollar amounts and will be recorded as deferred revenue;
  - (ii) bulk water access cards will be assigned to specific vehicles identified for access to designated fill stations;
  - (iii) the following shall apply in respect of access cards:
    - (A) first time applicants shall receive one access card per permit;
    - (B) a fee of \$20.00 shall be charged for each additional access card; and
    - (C) a fee of \$200.00 shall be charged for replacement of a lost or stolen card.
  - (iv) Access cards may be returned by the authorized user and any outstanding balance will be refunded to such user upon such return.
- (2) Consumption charges will be deducted from an access card balance based on the volume of water sold in accordance with the rate structure authorized by these Regulations.
- (3) Vehicles accessing a designated bulk fill station shall be inspected and approved by the Commission on an annual basis as part of its permitting process.
- (4) Designated bulk fill station procedures as prescribed by the Commission shall be adhered to at all times by authorized users as a condition of retaining such permit.
- (5) Failure to comply with the permitting requirements set out in this Section shall result in termination of a designated bulk fill station permit.
- (6) The Commission reserves the right to control flow rates at each designated fill station.

Area Master Capital Cost Contribution Charge

- 28.(1) The Commission may establish a water, Wastewater and Stormwater capital cost contribution charge to be collected from developers and/or future Customers requiring extension of oversized infrastructure.
- (2) The total amount of a capital cost contribution charge shall ensure that the cost impact to the Commission is neutral to the design, construction, financing and applicable overhead costs, as prescribed by the Commission.
- (3) The water, Wastewater and Stormwater capital cost contribution charge shall be calculated for charge areas referred to in Attachment 3 and allocated on the basis of the water, Wastewater and Stormwater capital cost contribution formula, as set out in Attachment 3.

- (4) Funds collected under the water, Wastewater and Stormwater capital cost contribution charge shall be placed in a reserve account and will be used for extension or improvements of the applicable system within the area related to the charge upon application and subject to the approval of the Board.
- (5) The Commission may require a capital cost contribution from developers and/or future users requiring extension or improvements of the Water, Wastewater or Stormwater System, the total amount of such capital cost contribution having a cost impact to the Commission which is neutral to the design, construction, financing and applicable overhead as prescribed by the Commission.
- (6) Cost factors to be used in calculating the capital cost contribution in subsection (5) shall include, but not be limited to the supply, storage, transmission, distribution, pressure control and fire protection requirements as required by the Commission from time to time.
- (7) The Commission will allocate capital costs in accordance with the Rates and Charges approved by these Regulations.

#### Regional Development Charge for Wastewater Infrastructure

29.(1) In this Section,

- (a) “Regional Development Charge” means a regional development charge for Regional Wastewater infrastructure;
- (b) “Regional Wastewater Infrastructure” means core regional Wastewater treatment facilities and trunk sewer systems directly conveying Wastewater to, or between, such facilities, including
  - (i) existing Wastewater treatment facilities (WWTF) that provide a regional Service including the facilities generally known as the Halifax WWTF, Dartmouth WWTF, Herring Cove WWTF, Eastern Passage WWTF, Mill Cove WWTF Beechville/Lakeside/Timberlea WWTF, and Aerotech WWTF,
  - (ii) trunk sewers and related appurtenances which directly convey Wastewater to regional treatment facilities, and
  - (iii) trunk sewers and related appurtenances which divert Wastewater from one regional treatment facility to another due to environmental concerns, capacity constraints or operational efficiency

but does not include infrastructure within or directly adjacent to approved or planned development areas which is required to directly support development within an approved or planned development area;

- c) “Regional Wastewater Master Plan” means an overall servicing plan for regional Wastewater treatment and collection systems to accommodate planned growth.

- (2) A Regional Development Charge shall be established to ensure the cost impact to the Commission is neutral to the design, construction and financing during construction of capacity expansion to Regional Wastewater Infrastructure related to planned growth.
- (3) A Regional Development Charge applicable to new buildings that will be connected to a Wastewater System, as detailed in Table 4A, shall be paid to HRM as agent for the Commission prior to the issuance of a building permit.

**Table 4A. Regional Development Charge - Wastewater**

<b>Type of Development</b>	<b>July 14, 2014</b>	<b>April 1, 2015</b>
<b>SUD/TH<sup>1</sup></b>	\$ 2,853.90	\$ 4,080.80
<b>MUD<sup>2</sup></b>	\$ 1,812.42	\$ 2,740.84
<b>ICI<sup>3</sup> (per sqft)</b>	\$1.41	\$ 2.24

1 SUD/TH – Single Unit Dwelling/Townhouse  
 2 MUD – Multiple Unit Dwelling  
 3 ICI – Industrial, Commercial or Institutional

- (4) For new buildings and building additions that are undertaken as the redevelopment of an existing serviced building, the Regional Development Charge applicable under subsection (3) shall be based on the net increase in residential units and/or square footage of floor space for Non-Residential construction, as applicable, but not including interior or underground parking.
- (5) When an un-serviced lot of land, occupied by a building, existed prior to July 14, 2014, the Regional Development Charge applicable under subsection (3) shall be payable to the Commission, when the building is connected to the Wastewater System.
- (6) A Regional Development Charge applicable to Industrial, Commercial or Institutional premises will be determined by applying the charge in subsection (3) to the area of the building.
- (7) The Regional Development Charge set out in Table 4A shall be collected by HRM on behalf of the Commission at the time an application for construction approval is submitted.
- (8) Funds collected under the Regional Development Charge shall be placed in a reserve account and shall be used for providing capacity in Regional Wastewater Infrastructure as defined in the current Regional Wastewater Master Plan.
- (9) Subject to subsections (10) and (11) the Commission may consider and approve deferral of payment of a Regional Development Charge in its sole discretion where such Charge otherwise payable is \$100,000 or greater.
- (10) The deferral of payment referred to in subsection (9) may be, in the Commission's sole discretion, up to 25% of the Regional Development Charge otherwise payable under this Section, which deferral shall be placed as a lienable charge on the property, to be collected by HRM, pursuant to clause 33(2)(a) of the Halifax Regional Water Commission Act.

- (11)The regional level infrastructure to be supported by the Regional Development Charge is deemed to be for the benefit of the properties to be liened.
- (12)Subject to subsections (13) and (14), the administration of the Regional Development Charge shall, every five years after, July 14, 2014, be reviewed by the Commission, including with reference to any changes to the Regional Wastewater Master Plan.
- (13)In the event changes to the inputs to the Regional Wastewater Master Plan, including growth projections, land use, consumption rates, inflow/infiltration assumptions, capital costs, financing costs, and benefit to existing customers, result in changes to the infrastructure requirements identified in the Regional Wastewater Master Plan, including the timing of their implementation, the Regional Development Charge, will be reviewed by the Commission and adjusted, subject to Board approval, prior to a five year review described in subsection (12).
- (14)In the event the changes to infrastructure requirements described in subsection (13) result in an impact of 15%, either in the positive or the negative, to the Regional Development Charge, the Commission will change the Regional Development Charge, subject to Board approval, to reflect such impact in infrastructure requirements. (June 2014)

#### Regional Development Charge for Water Infrastructure

30.(1) In this Section,

- (a) “Regional Development Charge” means a regional development charge for water infrastructure;
- (b) “Regional Water Infrastructure” means core regional water supply facilities and the water transmission systems directly conveying water from such facilities to the various distribution systems, including
- (i) existing water supply facilities that provide a regional Service including the facilities generally known as the J.D. Kline water supply facility at Pockwock Lake and the Lake Major water supply facility at Lake Major,
  - (ii) water transmission mains and related appurtenances which directly convey water from regional treatment facilities to the distribution system, and
  - (iii) water transmission mains and related appurtenances which divert water from one regional treatment facility supply area to another due to environmental concerns, capacity constraints or operational efficiency

but does not include infrastructure within or directly adjacent to approved or planned development areas which is required to directly support development within an approved or planned development area;

- (c) “Regional Water Master Plan” means an overall servicing plan for regional water treatment and transmission systems to accommodate planned growth.

- (2) A Regional Development Charge shall be established to ensure the cost impact to the Commission is neutral to the design, construction and financing during construction of capacity expansion to Regional Water Infrastructure related to planned growth.
- (3) A Regional Development Charge applicable to new buildings that will be connected to a Water System, as detailed in Table 4B, shall be paid to HRM as agent for the Commission prior to the issuance of a building permit.

Table 4B. Regional Development Charge - Water

Type of Development	July 14, 2014	April 1, 2015
<b>SUD/TH<sup>1</sup></b>	\$ 91.44	\$ 182.88
<b>MUD<sup>2</sup></b>	\$ 61.42	\$ 122.83
<b>ICI<sup>3</sup> (per sqft)</b>	\$ 0.04	\$ 0.09

1 SUD/TH – Single Unit Dwelling/Townhouse

2 MUD – Multiple Unit Dwelling

3 ICI – Industrial, Commercial or Institutional

- (4) For new buildings and building additions that are undertaken as the redevelopment of an existing serviced building, the Regional Development Charge applicable under subsection (3) shall be based on the net increase in residential units and/or square foot of floor space for Non-Residential construction, as applicable, but not including interior or underground parking.
- (5) When an un-serviced lot of land, occupied by a building, existed prior to July 14, 2014, the Regional Development Charge applicable under subsection (3) shall be payable to the Commission, when the building is connected to the Water System.
- (6) A Regional Development Charge applicable to Industrial, Commercial or Institutional premises will be determined by applying the charge in subsection (3) to the area of the building.
- (7) The charge set out in Table 4B will be collected by HRM on behalf of the Commission at the time an application for construction approval is submitted.
- (8) Funds collected under the Regional Development Charge shall be placed in a reserve account and shall be used for providing capacity in Regional Water Infrastructure as defined in the current Regional Water Master Plan.
- (9) Subject to subsections (10) and (11) the Commission may consider and approve deferral of payment of a Regional Development Charge in its sole discretion where such Charge otherwise payable is \$100,000 or greater.
- (10) The deferral of payment referred to in subsection (9) may be, in the Commission's sole discretion, up to 25% of the Regional Development Charge otherwise payable under this Section, which deferral shall be placed as a lienable charge on the property, to be collected by HRM pursuant to clause 33(2)(a) of the Halifax Regional Water Commission Act.

- (11)The regional level infrastructure to be supported by the Regional Development Charge is deemed to be for the benefit of the properties to be liened.
- (12)Subject to subsections (13) and (14), the administration of the Regional Development Charge for water shall, every five years after July 14, 2014, be reviewed by the Commission, including with reference to any changes to the Regional Water Master Plan.
- (13)In the event changes to the inputs to the Regional Water Master Plan, including growth projections, land use, consumption rates, inflow/infiltration assumptions, capital costs, financing costs, and benefit to existing customers, result in changes to the infrastructure requirements identified in the Regional Water Master Plan, including the timing of their implementation, the Regional Development Charge, will be reviewed by the Commission and adjusted, subject to Board approval, prior to a five year review described in subsection (12).
- (14)In the event the changes to infrastructure requirements described in subsection (13) result in an impact of 15%, either in the positive or the negative, to the Regional Development Charge, the Commission will change the Regional Development Charge, subject to Board approval, to reflect such impact in infrastructure requirements. (June 2014)

#### Recovery of Costs

31. The Commission may recover from a person who has violated these Regulations its costs incurred as a result of any such violation.

### **PART V - FIRE PROTECTION CHARGES**

#### Public Fire Service Charge

32. The Commission shall annually render to HRM not later than the last day of August, an invoice for fire protection service calculated in accordance with these Regulations.

#### Public Fire Protection Rate

33. Effective May 1, 2015 HRM shall pay, to the Commission for public fire protection services, the sum of \$8,031,718 which is comprised of:
- (a) payment for the period beginning April 1, 2015 and ending April 30, 2015 will be based on 1/12 of the 2014/15 amount of \$8,952,880;
  - (b) payment for the period beginning May 1, 2015 and ending March 31, 2016 based on 11/12 of \$7,947,976; and
- beginning April 1, 2016, HRM shall pay annually to the Commission for public fire protection services the sum of \$7,074,373.

### Special Service Supplied from Fire Hydrants

- 34.(1) Water supplied from fire hydrants is reserved for firefighting or for Commission Water, Wastewater or Stormwater System maintenance purposes.
- (2) Any person, other than the Halifax Regional Fire and Emergency Service or the Commission, who desires to use a fire hydrant for the supply of water, shall obtain prior written approval from the Commission.
- (3) The Commission may furnish water from a fire hydrant to persons requiring temporary supply pursuant to Section 8 of these Regulations.
- (4) Any connection to a fire hydrant other than in accordance with this section shall constitute an offence against these Regulations.

### Building Fire Protection Systems

- 35.(1) A customer, in respect of each of its buildings having a fire protection system installed, shall pay annually to the Commission fees for such service as follows:

Table 5. Charges for Sprinklers 2015/16

Description	Diameter mm	Ratio of Area to Reference Size	Annual Charge
Reference size	25	1.0	\$50.00
Fire Lines	50	4.0	\$67.00
Fire Lines	75	9.0	\$170.00
Fire Lines	100	16.0	\$262.00
Private Hydrants	150	36.0	\$314.00
Fire Lines	150	36.0	\$314.00
Fire Lines	200	64.0	\$402.00
Fire Lines	250	100.0	\$402.00
Fire Lines	300	144.0	\$402.00

Charges for Sprinklers 2016/17:

Description	Diameter mm	Ratio of Area to Reference Size	Annual Charge
Reference size	25	1.0	\$50.00
Fire Lines	50	4.0	\$68.00
Fire Lines	75	9.0	\$170.00
Fire Lines	100	16.0	\$269.00
Private Hydrants	150	36.0	\$373.00



Fire Lines	150	36.0	\$373.00
Fire Lines	200	64.0	\$478.00
Fire Lines	250	100.0	\$478.00
Fire Lines	300	144.0	\$478.00

- (2) A Customer shall be responsible for the cost of installing a private fire line from the street water main to a building, including a shut-off valve approved by the Commission.
- (3) The charges set out in Table 5 shall be based on the size of the line of a building fire protection system at the point of its connection with a hydrant line or sprinkler line.

## **PART VI - PROVISION OF SERVICE**

### Liability for Payment of Service

- 36.(1) Any person who applies to the Commission for water or Wastewater Service is deemed to agree to take and pay for such Service according to the rates and charges approved by these Regulations.
  - (2) Any person receiving Stormwater Service is liable for payment for such Service according to rates and charges as approved by the Regulations.
  - (3) Any person who receives water or Wastewater Service whether metered or unmetered, without the consent of the Commission, shall be liable for the cost of such Service as determined in the sole discretion of the Commission based upon its reasonable estimate of the amount of Service utilized.
  - (4) Where Service is supplied to a condominium unit, the condominium corporation in which the unit is situated shall be deemed to be the customer of record and shall be liable for payment of Service to the condominium unit.
  - (5) The Commission may, in its sole discretion, require a property owner who rents or leases a property, or a self-contained unit within such property, to open an account with the Commission for Service to such property or self-contained unit.

### Plumbing to be Satisfactory

- 37.(1)(a) All plumbing, pipes, fittings, vents, fixtures, and other devices used by a Customer in receiving Service from the Commission but which devices are not the property of the Commission, shall be installed in a manner provided by the Building Code Act (Nova Scotia) and regulations made thereunder and be approved by a person appointed as a building inspector under HRM's By-law B-201 respecting the Building Code, including its

successor, and as amended from time to time.

(b) Despite clause (a), in order to facilitate a conversion to AMI technology and eliminate the requirements for multiple visits to a Customer's premises any additional costs to the Commission related to the implementation of AMI, including meter installation, shall be borne by the Commission.

(2) Service shall not be provided, except for construction and testing purposes, until an applicant for Service has complied with the requirements set out in subsection (1).

(3) Water Service may be discontinued at any time, if in the opinion of the Commission, a person has not complied with the requirements of subsection (1).

(4) Water Service to a Customer may be discontinued at any time if, in the opinion of the Commission, the water meter measuring such Service is in a dirty, unsanitary or inaccessible place.

#### Prohibited Appliances

38. (1) Water Service may be refused or suspended by the Commission to a Customer who installs or uses any device or appurtenance, including booster pumps, quick opening or quick closing valves, water operated pumps or siphons, stand pipes, private fire hydrants or large outlets for supplying ships, which may cause sudden large demands of any duration or affect the stability of regulation of water pressure in the Commission's Water system.

(2) Permission to install or use any device or appurtenance listed in subsection (1) shall be obtained from the Commission.

#### Improper Use of Water, Wastewater, or Stormwater

39. No Customer shall permit the improper use of water, Wastewater, or Stormwater, nor sell or give water to any person, except upon such conditions and for such purposes as may be approved in writing by the Commission.

#### Capacity of Wastewater and/or Stormwater Systems

40. In the event the Commission deems that the Wastewater and/or Stormwater Systems, or any portion thereof, have insufficient capacity to accept existing or proposed Wastewater and/or Stormwater flows, the Commission may require that the amount of flow which can be Discharged into the Wastewater and/or Stormwater Systems be limited according to such terms and conditions as the Commission may approve.

#### Pipe Installation

41. The Commission shall not be required to install pipe in any short term or seasonal conditions

which, in its opinion, are not suitable for such installations and under which the Commission cannot guarantee a free flow of water, Wastewater and/or Stormwater in service pipes.

#### Unauthorized Extensions, Additions, or Connections

42. No person shall, without the prior written consent of the Commission, make or cause to be made any connection to any part of the water, Wastewater or Stormwater System, or in any way obtain or use the Water, Wastewater or Stormwater System in any manner other than as set out in these Regulations.

#### Interference with Commission Water System

43.(1) No person shall, unless authorized by the Commission in writing:

- (a) draw water from, open, close, cut, break, infill, alter or in any way injure or interfere with any fire hydrant, water main, service pipe, or property of the Commission;
- (b) obstruct the free access to any hydrant, valve, service box, meter, or property of the Commission.

(2) Nothing in this Section shall be deemed to prevent an officer or member of the Halifax Regional Fire and Emergency engaged in Discharge of his duties and responsibilities, from using any hydrant or other source of water supply of the Commission for such purpose.

#### Interference with Commission Wastewater or Stormwater System

44. No person shall, unless authorized by the Commission in writing:

- (a) Discharge Wastewater or Stormwater into the Wastewater System or Stormwater System;
- (b) open, cut, break into, or in any way injure or interfere with any part of the Wastewater System or Stormwater System, or any property of the Commission;
- (c) obstruct the free access by the Commission to any portion of the Wastewater System or Stormwater System.

### **PART VII - METERING**

#### Water to be Supplied Only by Meter

45A(1) Where AMI becomes available to a Customer, the Commission may require such Customer to have an AMI meter installed for the metering of Service.

(2) Where AMI is the standard meter in use, and a new Customer at an existing or new location refuses to permit the installation or continued use of an existing AMI meter and, as a result of such refusal, the Commission installs a manually read meter, such Customer will be subject to a charge of \$50.00 for the measurement of Service by a meter which is required to be read manually and such meter will be read on a quarterly basis.

45.(1) All water Service shall be metered, except as otherwise provided in these Regulations.

(2) The Commission shall approve the size and type of meter to be installed for water Service, which meters remain the property of the Commission while metering such Service.

(3) Where a Customer chooses to sub-meter to allocate costs, such sub-meter shall be installed downstream of the Commission's meter.

(4) Sub-meters referred to in subsection (3) shall be considered by the Commission to be owned, installed, read and maintained by the customer at the Customer's expense.

(5) Despite subsections (3) and (4), data provided by the Commission's meter shall be used to prepare billings for Service.

(6) In the event of a discrepancy between readings displayed by a meter and a meter reading device located on the exterior of a building to which water service is provided the reading of the meter shall govern.

(7) A Customer shall not sell unmetered water to any person without the prior written approval of the Commission.

#### Installation and Removal of Water Meters

46.(1) All meters, outside register devices, and radio frequency units, shall be installed, maintained and removed with the approval of and under the supervision of the Commission.

(2) No person shall install, alter, change or remove a meter without the prior written permission of the Commission.

(3) Each metered Service shall have a stop device located at the property line or outside the building foundation wall of a premises where Service is provided, as determined by the Commission, to permit control of such Service.

(4) Each Service line shall be metered individually.

(5) A Service Connection to a meter shall be installed with a shut-off valve on both sides of the meter, inside the building, to the satisfaction of and without expense to the Commission, and as prescribed by the Commission.

### Location of Water Meters

- 47.(1) The Commission shall have the right to refuse water Service to, or suspend the water Service of any Customer who does not provide a place which, in the opinion of the Commission, is suitable for a meter, and a related reading device located on the exterior of the building to which Service is provided.
- (2) A meter shall be located in the building to which water Service is provided in close proximity to the point of entry into such building of the service pipe, in a location where it can be easily read, and replaced, and where it will not be exposed to temperatures below the freezing point of water.
- (3) A meter reading device located on the exterior of a building to which water Service is provided shall be located where it can be easily read and replaced.
- (4) In the event of an alteration or renovation to a building to which water Service is provided, the Customer shall be responsible, as required by the Commission, to relocate the meter, including, as may be required by the Commission, a meter reading device located on the exterior of such building, at the Customer's expense and to a location approved by the Commission.
- (5) Where the premises of a Customer are of such a nature that a meter cannot be adequately installed in a building or if the building is not sufficiently resistant to the effects of frost to maintain the proper and accurate functioning of the meter, the Commission may order the Customer to provide a reasonably frost resistant insulated receptacle in which the meter can be placed for its safe and accurate functioning.
- (6) Until a Customer complies with the requirements set out in subsection (5) the Commission may refuse or suspend water Service to the premises.
- (7) In order for a Customer to comply with the requirements set out in subsection (5), the Commission may require such Customer to have installed at the Customer's expense a by-pass around a meter which is 50 mm or larger in diameter.

### Master Water Meters

- 48.(1) In circumstances where a Customer or Customers is or are, as the case may be, provided Service by the Commission with multiple water meters, the Commission may supply, at its expense, a master meter and install such master meter in a location on such Customer's premises in a manner approved by the Commission.
- (2) A Customer is liable to pay for water which passes through the meter measuring Service to such Customer, provided, however, that if the aggregate of the amounts of water passing through the meters of individual Customers is less than the amount of water passing through the master meter associated with the meters of such individual Customers, the difference in cost of Service obtained by subtracting the aggregate cost of metered water Service measured by the meters of individual Customers from the cost of metered water Service measured by the master meter shall be shared equally among such individual Customers.

- (3) The Commission may suspend water Service without notice to those individual Customers referred to in subsection (2) who fail to pay their respective portion of the difference in cost of water Service described therein.
- (4) Customers receiving water Service where there is a master meter providing Service as described in subsection (1) are jointly and severally liable for all water passing through such master meter and for the minimum charges therefor as provided herein.
- (5) The Customer, or group of individual Customers referred to in this section, as the case may be, is responsible for the distribution of water from the Commission's master meter to the properties of a Customer or Customers, and the Commission shall be under no obligation to install, maintain or replace any pipes, appliances, fixtures, or other apparatus connected therewith.

### Damage to Water Meters

- 49.(1) A Customer is responsible for the condition of the water meter installed on the service pipe through which Service is provided to the Customer's premises and shall take reasonable measures to protect the condition of such water meter.
- (2) A Customer is liable for any damage to a water meter, and related equipment, providing Service to such Customer's premises, including damage resulting from carelessness, hot water, steam, or the action of frost.
- (3) Costs incurred by the Commission resulting from damage to a water meter and related equipment providing Service to a Customer's premises shall be paid by the Customer.
- (4) After tendering a bill to a Customer for costs referred to in subsection (3), and such bill remains unpaid 30 days thereafter, the Commission may suspend water Service to such Customer.

### Meter Testing

- 50.(1) Subject to subsection (2), and in respect of meter sizes 15mm to 50mm, upon receiving a request from a Customer to have such Customer's meter tested the Commission may charge the sum of \$100.00 to defray in part the cost of conducting the test.
- (2) If the test referred to in subsection (1) indicates that:
  - (a) for positive disc type displacement meters the meter is over-registering by more than 1.5 %, or
  - (b) for turbine or compound meters the meter is over-registering by more than 3%,the sum charged to a Customer under subsection (1) shall be refunded to such Customer and the bill for Service rendered to that Customer shall be adjusted accordingly, provided that no volumetric adjustment shall be made for a period beyond two years prior to such test and one refund shall be made only to the Customer who, based on such test results, overpaid for Service.

- (3) For meters of 80 mm and larger which require on-site testing, the Commission shall levy a fee to cover the expenses in contracting a third party to conduct testing.
- (4) The amount referred to in subsection (3) shall be billed to the Customer if the testing conducted confirms to the satisfaction of the Commission that the meter was providing accurate readings prior to the Customer's request that the meter be tested.
- (5) If a meter has been removed from service due to its replacement any dispute between the Commission and the Customer will be resolved based on the best information available in the absence of the meter, including historic metered consumption and occupancy and use of the premises in respect of which such Service is provided.

## **PART VIII - WATER SERVICE**

### Water Service Connection

51. Upon receipt of an application for water Service to any premises fronting on a public street, where there exists adjacent to such section of public street a Commission owned and active water main and such premises are not already provided with water Service, the Commission shall allow the installation of a Service Connection which it considers to be of suitable size to provide the Service required, provided that
- (a) no water Service smaller than 20 mm in diameter shall be installed;
  - (b) the necessary excavation for the laying of the Service Connection, backfilling, and replacement of the street and sidewalk surfaces from the water main in the street to the premises, including the supply and laying of the Service Connection and fittings to the specifications of the Commission, shall be the responsibility of the applicant for water Service and all such work shall be performed without cost to the Commission;
  - (c) such excavation may be the same excavation as is used for the Service Connection or if minimum horizontal and vertical separation between water and Service Connections cannot be obtained, a separate excavation for the Water Service Connection shall be required, provided, however, that in either case, the excavation shall be carried out by the applicant to the satisfaction of the Commission;
  - (d) should any person make application for more than one Service Connection to a premises, the decision respecting the necessity of the additional service pipe shall be made by the Commission;
  - (e) all Service Connections shall be installed in accordance with the Building Code Act, R.S.N.S. 1989, c. 46 and regulations made under the authority of that Act and to the satisfaction of the Commission;
  - (f) when a Service Connection has been installed without objection from the Customer as to its location, no subsequent removal of or alteration to the position of the Service Connection shall be made except at the expense of the Customer requesting such removal or alteration;

- (g) each water Service shall be individually metered;
- (h) in the event of a change of the use of such premises, including by way of rezoning, re-subdivision, condominium conversion or otherwise, where such use would result in an increased occupancy of the premises, the owner of such premises shall apply to the Commission for a determination of whether the existing Service Connection or Connections is or are, as the case may be, of a suitable size to provide the increased demand required, pursuant to which application:
  - (i) the applicant may be required to provide a hydraulic analysis of the proposed water use and existing system to determine the suitability of the Service for the new use, subject to the Commission, in its sole discretion, determining whether existing Service Connections are not suitable;
  - (ii) all such Service Connections shall be installed at the owner's expense, from the main water line in the public street or right of way to the applicant's premises, such installation to be in accordance with the Building Code Act, R.S.N.S. 1989, c.46 and regulations made under the authority of that Act and to the satisfaction of the Commission;
  - (iii) When a Water Service Connection is abandoned or is to be abandoned, the Commission may require the owner of the property serviced by such Water Service Connection to, at its expense, cap off such Water Service Connection at the water main water line referred to in subclause (ii) or as otherwise prescribed by the Commission.

Water Service Cross Connection Control & Backflow Prevention

- 52.(1) In the event of any breach, contravention or non-compliance by a person of any of the provisions in subsections (2), (3), (4) or (5), the Commission may:
  - (a) suspend water Service to such person, or
  - (b) give notice to the person to correct the breach, contravention or non-compliance within 96 hours, or a specified lesser period, provided that, if such person fails to comply with such notice, the Commission may immediately suspend water Service to such person.
- (2) No person shall connect, cause to be connected, or allow to remain connected to a Water System, or a plumbing installation, without the prior written approval of the Commission, any piping fixtures, fittings container or sanitary appliance in a manner which may cause water, Wastewater, or any other liquid, chemical or substance, to ingress or egress the Water System.
- (3) Where, in the opinion of the Commission, there may exist a risk of contamination to the Water System, the Commission may, despite subsection (1), require a Customer, at the Customer's sole cost and expense, to install at any point on the Customer's Water Service Connection or water service pipe, one or more backflow prevention (BFP) devices, which devices shall be of a quality and type approved by the Commission.
- (4) All BFP devices installed pursuant to subsection (3) shall be maintained in good working



order, inspected and tested by a certified tester approved by the Commission, at the expense of the Customer, and carried out annually or at such other intervals as the Commission may require.

- (5) A Customer shall submit a report in a form approved by the Commission respecting all tests performed pursuant to subsection (4) on a BFP device within 30 days of a test, such report form to be displayed on or adjacent to the BFP device on which the tester shall record:
  - (a) the name and address of the owner of the device;
  - (b) the location, type, manufacturer, serial number, and size of the device;
  - (c) the test date, the tester's initials, the tester's name, the name of the tester's employer, and the tester's license number.
- (6) The Commission shall maintain a program for the issuance, renewal and cancellation of Cross Connection Control Tester's Licenses, which shall include minimum standards, insurance requirements, fees and administrative procedures.
- (7) Installation, maintenance, field-testing and selection of all BFP devices shall conform to the latest edition of CSA 864.10 and CSA B64 series.

#### Alternate Water Supply Prohibited

- 53.(1) Subject to subsection (2), where a Customer's water system is connected to the Commission's Water System, connection to any other source of water supply is prohibited.
- (2) The prohibition in subsection (1) does not apply where a Customer has installed on its private water system or Water Service Connection a device acceptable to the Commission to prevent the flow of water from another source of water supply into the Commission's Water System.

#### Repairs to Water Service Connection

54. Where a repair to a Service Connection is required:
  - (a) it shall be carried out as soon as practicable at the Commission's expense if the repair is located between the main and the street boundary line or the easement boundary, and otherwise at the Customer's expense;
  - (b) despite clause (a) the Commission may make such repairs for any Customer provided the Customer agrees to pay the cost of repair and provided the Customer requesting the Commission carry out such work deposits with the Commission a sum equal to the estimated cost of the work; and
  - (c) should a repair be required on the Customer's portion of the Service Connection, and the Customer, after being notified, refuses or unreasonably delays to have repairs made, the

Commission may, upon notice to the Customer, discontinue the Customer's water Service in order to prevent wastage of water or property damage.

#### Water Service Pressure Reducing Valves

55. Where, in the opinion of the Commission, a pressure reducing valve is required for proper Service to a Customer:

- (a) the valve shall be installed on the service pipe between the meter and the shutoff valve on the supply side of the meter;
- (b) the type of valve shall be satisfactory to the Commission; and
- (c) the Customer shall be responsible for the cost of purchasing, installing and maintaining the valve.

#### Water Service Control Valves

56. In respect of water service control valves;

- (a) the service box or valve housing the premises' control valve shall be exposed for access by Commission personnel at all times,
- (b) all control valve service boxes or valves shall be fully exposed and adjusted to final landscape grade before the installation of the premises' water meter,
- (c) any adjustment to the service box or valve box shall be the responsibility of the Customer,
- (d) the Commission may provide the service to adjust the service box or valve box and invoice the Customer for all expenses incurred in providing such service,
- (e) in the event the service box is buried, paved over, back-filled or damaged as a result of carelessness, willful obstruction or any other like occurrence that, in the opinion of the Commission, results in the Commission being required to expose, adjust or repair the service box and/or valve box, such activity of the Commission shall be at the Customer's expense,
- (f) the Commission may undertake such activities as it deems necessary to gain access to the premises' control valve or curb-stop without expense to the Commission,
- (g) in respect of actions undertaken by the Commission pursuant to clauses (e) and (f), reinstatement of the road, right-of-way, driveway, sidewalk, curb or landscape will, at the discretion of the Commission, be charged to and recovered from the Customer.

#### Water Conservation Directives

- 57.(1) The Commission may implement water conservation measures, if in the opinion of the Commission, such measures will permit the Commission to provide a reliable, continuous water supply to all Customers serviced by the Commission.
- (2) During such times as water conservation measures referred to in subsection (1) are implemented, Customers who do not comply with such measures may have their water Service suspended during such period as the Commission's water conservation measures are in place.
- (3) The cost of turning on a water Service suspended pursuant to subsection (2) will be the responsibility of the Customer.

#### Acceptance of Private Community Water, Wastewater and Stormwater Systems

58. The acceptance of private community water, Wastewater and Stormwater systems by the Commission shall be in accordance with Attachment 1 to these Regulations, entitled "Procedure for Acceptance of Private Community Water, Wastewater and Stormwater Systems".

### **PART IX - FIRE PROTECTION**

#### Fire Protection Service Pipes

- 59.(1) Upon receipt of an application, the Commission will permit an applicant to install a fire protection service pipe from the street main to the applicant's premises, subject to the applicant being responsible for all excavation, backfill, labour, material and street and sidewalk restoration costs related to such fire protection service pipe installation and subject to the Commission making the required connection to the street main at the applicant's cost.
- (2) If requested by an applicant, and subject to the applicant having applied for and received all required approvals, a metered service pipe may be connected to the fire protection service pipe outside the serviced premises provided such metered service pipe is fitted with a shutoff valve approved by the Commission.
- (3) The portion of a private fire line that extends from the water main in a street to the street boundary line of a property shall be, and is hereby deemed to be, vested in the Commission and the Commission's portion of such line shall be maintained by the Commission.
- (4) Discharge of water from fire protection systems for maintenance purposes shall be in accordance with these Regulations.

#### Private Fire Protection

- 60.(1) Fire protection plumbing within buildings shall be installed in such manner that all pipes will be open and readily accessible for inspection at any time by authorities having jurisdiction in such matters, and no connection for any purpose other than fire protection shall be made thereto,
- (2) Unless approved by the Commission in writing, no fire protection charge line shall be connected in any manner to a metered Service,
- (3) A Customer is solely responsible for the maintenance, repair and replacement of all privately owned fire protection systems, including fire protection plumbing, valves, sprinklers, hydrants, and related appurtenances.

## **PART X - WASTEWATER AND/OR STORMWATER SERVICE**

### Wastewater and/or Stormwater Service Connections

- 61.(1) Every Wastewater and Stormwater Service Connection shall be designed and constructed at the expense of the Customer served by such Service Connection, whether on privately owned property or otherwise.
- (2) No person shall make a physical pipe connection to the Wastewater System or the Stormwater System without the prior written approval of the Commission.
- (3) The Commission may require a Wastewater or Stormwater Service Connection to be inspected and brought into compliance with these Regulations and the Commission's Design and Construction Specifications as amended from time to time.
- (4) The Commission shall determine the necessity of having more than one Wastewater Service Connection or more than one Stormwater Service Connection to a premises, upon application by any person requesting more than one such connection.
- (5) When the portion of a Wastewater or Stormwater Service Connection located within a street right of way or easement has been installed without objection from a Customer respecting location of such Service Connection, no subsequent removal or alteration of the location of such Service Connection shall be made except at the expense of the Customer requesting such removal or alteration.
- (6) In the event of a change of the use of premises, by way of rezoning, re-subdivision, condominium conversion or otherwise, where such use would result in an increased occupancy of the premises, the owner of such premises shall apply to the Commission for a determination as to whether the existing Wastewater or Stormwater Service Connection or Connections is or are, as the case may be, of a suitable size to provide the increased demand required on such Service Connection or Connections and, in respect of such application,
  - (a) the applicant may be required to provide a hydraulic analysis of the proposed Wastewater and/or Stormwater generation and existing downstream system capacity to determine the suitability of the Service Connection for a proposed new use;

(b) should the Commission determine that the existing Wastewater and/or Stormwater Service Connection or Connections is or are, as the case may be, not suitable, the property owner shall comply with the requirements of the Commission with respect to its determination of the appropriate type and size of Wastewater or Stormwater Service Connection to be utilized; and

(c) such Wastewater and/or Stormwater Service Connections shall be installed at the owner's expense and all installation shall be to the satisfaction of the Commission.

(7) When Wastewater or Stormwater Service Connections are abandoned or are to be abandoned, the Commission shall require the owner of the property serviced by such Wastewater or Stormwater Service Connections to, at its expense, cap off such Service Connection or Connections at the main, or as otherwise prescribed by the Commission.

(8) The Commission may give notice in writing to an owner of a property serviced by the Wastewater System or Stormwater System, requiring such owner, within the time specified in such notice, to connect to the Wastewater System or Stormwater System through a Wastewater or Stormwater Service Connection.

#### Repairs to Wastewater and/or Stormwater Service Connections

62. In the event a Wastewater or Stormwater Service Connection is obstructed, the following procedure shall be followed in removing the obstruction:

(a) at the Customer's expense, the Customer shall be responsible for the initial investigation and clearing of the obstruction with the services of a licensed plumber to identify the cause and the location of the obstruction and take all necessary measures to remove the obstruction before requesting the Commission for assistance;

(b) if the obstruction is located in the portion of the Service Connection on private property, the Customer shall be responsible for all the costs of removal of the obstruction, including the expenses of any contractor to excavate and replace the pipe if necessary and including obtaining any permits required by HRM by-laws or the Commission before commencing any excavation;

(c) if the obstruction is located in the portion of the Service Connection on HRM property, between the main and the street line or the easement boundary, and a plumber is unable to remove it, the Customer shall submit to the Commission a written report from a plumber and a video identifying the location and probable cause of the obstruction and on receipt of such report and video, the Commission shall investigate the obstruction and if it is determined by the Commission that the cause of the obstruction was:

(i) non-structural, the Commission shall advise the Customer of its determination and the Customer shall be responsible for clearing the obstruction, including replacing the pipe, if necessary;

(ii) caused by a broken, sheared, sagged, or collapsed pipe or some other structural cause, the Commission will rectify the deficiency and reimburse the Customer

for the cost of plumbing and video services in an amount not exceeding \$400.00, including HST; and

- (iii) caused by the roots from an HRM owned tree, the Commission will clear the obstruction and, on behalf of HRM, reimburse the Customer for the cost of plumbing and video services in an amount not exceeding \$400.00, including HST.

## **PART XI - WASTEWATER AND STORMWATER DISCHARGE**

### Discharge into the Wastewater System

63.(1) No person shall Discharge into a Wastewater System, Wastewater which causes or may cause:

- (a) a health or safety hazard;
- (b) obstructions or restrictions to the flow in the Wastewater System;
- (c) an offensive odour to emanate from the Wastewater System, including with respect to Wastewater containing hydrogen sulphide, mercaptans, carbon disulphide, other reduced sulphur compounds, amines, or ammonia in such quantity that may cause an offensive odour;
- (d) damage to a Wastewater System;
- (e) interference with the operation and maintenance of the Wastewater System;
- (f) a restriction of the beneficial use of Biosolids from the Commission's Wastewater System;
- (g) effluent from the Commission's Wastewater System to be in violation of any Provincial or Federal Acts or Regulations;
- (h) capacity or hydraulic impacts which may interfere with the operation of the Wastewater System.

(2) No person shall Discharge into the Wastewater System, Wastewater with any one or more of the following characteristics:

- (a) a pH less than 5.5 or greater than 9.5;
- (b) two or more separate liquid layers;
- (c) a temperature greater than 65 degrees Celsius.

(3) No person shall Discharge, into the Wastewater System, one or more of the following:

- (a) Combustible Liquids;

- (b) Fuel;
  - (c) Hauled Waste or Leachate, except with the prior written approval of the Commission;
  - (d) Ignitable Waste including but not limited to, flammable liquids, solids, or gases, capable of causing or contributing to an explosion or supporting combustion in the Wastewater System;
  - (e) detergents, surface-active agents or other substances that may cause excessive foaming in the Wastewater System;
  - (f) dyes or colouring materials which pass through the Wastewater System and discolour the Wastewater infrastructure or effluent;
  - (g) Pathological Waste in any quantity;
  - (h) PCBs;
  - (i) Pesticides;
  - (j) Reactive Waste;
  - (k) Waste Radioactive Substances, including naturally occurring radioactive material (NORM), in excess of concentrations greater than those specified for Release to the environment under the *Nuclear Safety and Control Act* and Regulations made thereunder, each as amended from time to time;
  - (l) Hazardous Waste;
  - (m) Extraneous Water or Wastewater without the prior written approval of the Commission;
    - (i) animal offal;
    - (ii) seawater;
- (4) Subject to Sections 65 and 74, no person shall Discharge into the Wastewater System, Wastewater containing a substance with a concentration in excess of any of the limits set out in Table 6:

Table 6: Limits for Discharge to Wastewater System

Parameter	Milligrams Per Litre
Aluminum, Total	50

Parameter	Milligrams Per Litre
Antimony, Total	5
Arsenic, Total	1
Barium, Total	5
Benzene	0.01
Beryllium, Total	5
Biochemical Oxygen Demand	300
Bismuth, Total	5
Cadmium, Total	0.7
Chemical Oxygen Demand	600
Chloride	1500
Chloroform	0.05
Chromium, Total	2
Cobalt, Total	5
Copper, Total	1
Cyanide, Total	2
1,2 - Dichlorobenzene	0.05
1,4 - Dichlorobenzene	0.08
cis - 1,2 - Dichloroethylene	4.0
trans - 1,3 - Dichloropropylene	0.15
Ethylbenzene	0.06
Fluoride	10
Iron, Total	50
Lead, Total	1
Manganese, Total	5
Mercury, Total	0.01
Methylene chloride	0.2
Molybdenum, Total	5
Nickel, Total	2
Oil & Grease - mineral or synthetic in origin (TPH)	15
Oil & Grease - animal or vegetable in origin	100
Phenolic Compounds (4AAP)	1
Phosphorus, Total	10
Selenium, Total	1
Silver, Total	2
Sulphates Expressed as SO <sub>4</sub>	1500
Suspended Solids, Total	300
Sulphide (as H <sub>2</sub> S)	1.0
1,1,1,2 - Tetrachloroethane	0.5
1,1,1,2,2 - Tetrachloroethylene	0.5
Tin, Total	5
Titanium, Total	5
Toluene	0.01
Total Kjeldahl Nitrogen	100
Trichloroethylene	0.5



Parameter	Milligrams Per Litre
Vanadium, Total	5
Xylene, Total	0.3
Zinc, Total	2

\*Refer to section 63(2) for pH limit

\*\*A reference to "Total" in this table denotes total concentrations of all forms of the metal and ion including both particulate and dissolved species.

- (5) No person shall dilute Wastewater in order to become compliant with these Regulations, without the prior written approval of the Commission.
- (6) No person shall Discharge Uncontaminated Water into the Wastewater System without the prior written approval of the Commission.

### Stormwater Discharge to the Wastewater System

- 64.(1) The Commission may from time to time undertake testing or inspections to identify and locate connections that convey Stormwater into the Wastewater System.
  - (2) No person shall, without the prior written approval of the Commission connect, cause to be connected, or allow to remain connected to the Wastewater System or plumbing installation, any piping, fixtures, sump pumps, downspouts, fittings appliances or like equipment or device in a manner which allows or may allow Stormwater to ingress or flow into the Wastewater System.
  - (3) The Commission may direct a person to Discharge Stormwater to the Stormwater System, a surface area or watercourse.
  - (4) Upon the Commission creating a new Service account for a person, the Commission may require a Wastewater Service Connection to be inspected and brought into compliance with these Regulations, at such person's expense.
  - (5) The inspection required in subsection (4) shall include the Discharge location of any roof or foundation drain or sump pump and such other inspection activities as will permit the Commission to determine whether a Wastewater Service Connection is in compliance with these Regulations.
  - (6) The Commission may determine, in its discretion, that this Section does not apply to existing premises connected to an existing Combined Sewer system or to new premises intended to be connected to a Combined Sewer system, provided that those premises are not serviced or able to be serviced by a separate Stormwater System.

### Extra Strength Wastewater Surcharge

- 65.(1) The Commission may enter into a surcharge agreement with a Customer who Discharges

Extra Strength Wastewater into the Wastewater System and who is not in compliance with these Regulations, respecting Discharges of,

- (a) Biochemical Oxygen Demand; and
  - (b) Suspended Solids, total.
- (2) A surcharge agreement referred to in subsection (1) may include terms and conditions under which Discharge will be permitted by the Commission and may include a method to allow the Commission to recover its costs resulting from the Discharge.

#### Discharge into and Obstruction of the Stormwater System

66.(1) No person shall Discharge into a Stormwater System, matter which causes or may cause,

- (a) a health or safety hazard;
  - (b) interference with the operation of a Stormwater System;
  - (c) obstruction or restriction of a Stormwater System or the flow therein;
  - (d) damage to a Stormwater System;
  - (e) impairment to the quality of the water in a Stormwater System; or
  - (f) the quality of the water Discharged from a Stormwater System owned or operated by the Commission to be in violation of Provincial or Federal Acts or regulations.
- (2) No person shall Discharge into a Stormwater System, matter which results in one or more of the following characteristics,
- (a) visible sheen, film or discoloration;
  - (b) two or more separate layers;
  - (c) a pH less than 6.0 or greater than 9.5;
  - (d) a temperature greater than 40 degrees Celsius; or
  - (e) foam or any matter which, by itself or in combination with another substance, is capable of producing foam that will persist for 5 minutes or more.
- (3) No person shall Discharge into a Stormwater System,
- (a) Hazardous Waste;
  - (b) Combustible Liquids;
  - (c) floating debris;

- (d) Fuel;
- (e) Hauled Waste;
- (f) Pathological Waste;
- (g) PCB's;
- (h) Pesticides;
- (i) Reactive Waste;
- (j) Toxic Substances;
- (k) Waste Radioactive Substances, in excess of concentrations greater than those specified for Release to the environment under the *Nuclear Safety and Control Act* and regulations made thereunder, each as amended from time to time;
- (l) E. coli colonies in excess of 200 per 100 mL;
- (m) water from sprinkler systems and Non-contact Cooling Water,
- (n) water from washing equipment used in the mixing and delivery of concrete and cement based products;
- (o) animal offal;
- (p) oil and grease, animal or vegetable in origin;
- (q) any substance other than Stormwater or Uncontaminated Water except as authorized in writing by the Commission.

(4) No person shall Discharge into a Stormwater System, matter containing a concentration, expressed in milligrams per litre, in excess of the limits set out in Table 7 as follows:

Table 7. Limits for Discharge to Stormwater System

Parameter	Milligrams per litre
Arsenic, Total	0.02
Benzene	0.002
Biochemical Oxygen Demand	15
Cadmium, Total	0.008
Carbon tetrachloride	0.02
Chloroform	0.002
Chromium, Total	0.02
Copper, Total	0.03
Cyanide, Total	0.02
Ethylbenzene	0.002
Fluoride	1.5
Lead, Total	0.05
Mercury, Total	0.0004
Nickel, Total	0.08
Phenols	0.008
Phosphorus, Total	0.4
Selenium, Total	0.01
Silver, Total	0.001
Suspended Solids, Total	15
Thallium, Total	0.01
Toluene	0.002
1,1,2 - Trichloroethylene	0.0076
Xylene, Total	0.0044
Zinc, Total	0.04
1,2 - Dichlorobenzene	0.0056
1,4 - Dichlorobenzene	0.0056
cis -1,2 - Dichloroethylene	0.0056
trans - 1,3 - Dichloropropylene	0.0056
Methylene chloride	0.0052
1,1,2,2 - Tetrachloroethane	0.017
1,1,2,2 - Tetrachloroethylene	0.0044
Di-n-butyl phthalate	0.015
Bis (2-ethylhexyl) phthalate	0.0088
PAHs	0.002

\*Refer to section 66(2) for pH limit

\*\*A reference to "Total" in this table denotes total concentrations of all forms of the metal and ion including both particulate and dissolved species.

(5) No person shall permit erosion or sediment runoff which results in an exceedance

of any of the limits in Table 7 to enter a Stormwater System.

- (6) No person shall infill or alter a Stormwater Ditch unless authorized by the Commission in writing.
- (7) The Commission may direct and require a person or property owner who infilled or altered a Stormwater Ditch to remove the infill or remediate any alteration.
- (8) The cost of removal or remediation of Ditch alterations not authorized by the Commission shall be the responsibility of the person or property owner.
- (9) The Commission may prohibit a person or Customer from connecting sump pumps or downspouts to a Stormwater Service Connection and may require a person or a Customer to disconnect sump pumps or downspouts from the Stormwater Service Connection if, in the opinion of the Commission, the Stormwater System may be subject to capacity restrictions as a result of the connection of such sump pumps and downspouts.

#### Wastewater Discharges to Stormwater Systems

- 67.(1) The Commission may, from time to time, undertake testing or inspections to identify and locate Wastewater entering into a Stormwater System.
  - (2) No person or Customer shall connect, cause to be connected, or allow to remain connected to the Stormwater System or plumbing installation, without the express written consent of the Commission, any piping, fixtures, fitting or appliance in a manner which may allow Wastewater or any other liquid not authorized by these Regulations to ingress or flow into the Stormwater System.
  - (3) No person or Customer shall Discharge Wastewater anywhere except into the Wastewater System, a private on-site Wastewater system or a private central Wastewater collection system and treatment facility.
  - (4) Where in the opinion of the Commission, there exists a risk of Wastewater or any other liquid not authorized by these Regulations, flowing into a Stormwater System, the Commission may require a Customer, at such Customer's sole cost and expense, to install or remove at any point on a Stormwater System, one or more fittings or appurtenances to prevent such connection.
  - (5) The Commission may require a Stormwater Service Connection to be inspected and brought into compliance with the provisions of these Regulations, at the property owner's expense, when a new Service account is created.

#### Swimming Pools and Spas

- 68.(1) Water from swimming pools, wading pools, whirlpools, hot tubs, spas and other similar facilities may be Discharged into the Wastewater or Stormwater System, subject to compliance with these Regulations, including Part II of these Regulations if the water is Extraneous Water or Wastewater.

## **PART XII - PRETREATMENT**

### **Pretreatment Facilities**

- 69.(1) Where a Customer installs a Pretreatment Facility, such Facility shall be installed upstream of a Monitoring Access Point, where a Monitoring Access Point exists or is proposed.
- (2) An owner or operator of a Pretreatment Facility shall ensure the design, operation and maintenance of a Pretreatment Facility achieves its treatment purpose in accordance with its manufacturer's operating specifications.
- (3) An owner or operator of a Pretreatment Facility shall ensure that any waste products recovered from a Pretreatment Facility are not Discharged into the Wastewater or Stormwater System
- (4) Maintenance records and waste disposal records respecting a Pretreatment Facility shall be available to the Commission upon request, which records shall be retained by an owner or operator of a Pretreatment Facility for a minimum of two years following the generation of such records.

### **Food Related Grease Interceptors**

- 70.(1) Any person who has a permit to operate a restaurant or like food service establishment, or an Industrial, Commercial or Institutional premises where food is cooked, processed or prepared, and which premises are connected directly or indirectly to a Wastewater System, shall comply with these Regulations.
- (2) Where a grease Interceptor is installed or is required to be installed pursuant to subsection (1),
- (a) the grease Interceptor shall not Discharge to the Stormwater System;
- (b) the grease Interceptor shall be installed in compliance with the most current requirements of the Building Code Act, R.S.N.S. 1989, c. 46 and regulations made under the authority of that Act;
- (c) the grease Interceptor shall meet the requirements of the most recent version of the Canadian Standards Association document B481 Series-12, entitled "Grease Interceptors" unless otherwise permitted by the Commission;
- (d) maintenance requirements for grease Interceptors shall be posted in the workplace in proximity to the grease Interceptor;
- (e) a maintenance schedule and record of maintenance for each grease Interceptor shall be available to the Commission upon request for each such device installed;
- (f) the owner or operator of a premises referred to in subsection (1) shall keep

documentation respecting proof of the grease Interceptor clean-out and maintenance and oil and grease disposal for a period of two years following the generation of such a record;

- (g) no person shall use enzymes, bacteria, solvents, hot water or other agents to facilitate the conveyance of oil and grease through a grease Interceptor to a sewer system; and
- (h) removal of retained or trapped materials from a grease Interceptor shall be accomplished by pumping or other physical means and the resulting recovered material shall be hauled away and disposed in accordance with applicable statutes and regulations.

#### Vehicle and Equipment Service Oil and Grease Interceptors

71.(1) Every owner or operator of a vehicle or equipment service station, repair shop or garage or of an Industrial, Commercial or Institutional premises or any like establishment where motor vehicles are repaired, lubricated or maintained, and from which premises the Wastewater Discharge is directly or indirectly connected to a sewer, shall comply with these Regulations.

(2) Where an oil and grease Interceptor is installed or is required to be installed pursuant to subsection (1),

- (a) the oil and grease Interceptors shall not Discharge to the Stormwater System;
- (b) oil and grease Interceptors shall be installed in compliance with the most current requirements of the Building Code Act, R.S.N.S. 1989, c. 46 and regulations made under the authority of that Act, and be maintained as recommended by the Canadian Petroleum Products Institute (CPPI);
- (c) all oil and grease Interceptors and separators shall be maintained in good working order by the owner or operator of the premises where they are located, according to the product manufacturer's recommendations and shall be inspected regularly to ensure performance of such Interceptors and separators is maintained to the manufacturer's specifications for performance and to ensure surface oil and sediment levels do not exceed the recommended level;
- (d) a maintenance schedule and record of maintenance for each oil and grease Interceptor installed shall be available to the Commission upon request;
- (e) the owner or operator of a premises referred to in subsection (1) shall keep documentation respecting proof of the Interceptor clean-out and oil and grease disposal for a period of two years following the generation of such a record;
- (f) no person shall use enzymes, solvents, hot water or other agents to facilitate the conveyance of oil and grease through an oil and grease Interceptor to a sewer system; and
- (g) removal of retained or trapped materials from an oil and grease Interceptor shall be accomplished by pumping or other physical means and the resulting recovered

material shall be hauled away and disposed of in accordance with applicable statutes and regulations.

### Sediment Interceptors

- 72.(1) Every owner or operator of a premises from which sediment may directly or indirectly enter the Wastewater System, including premises using a ramp drain or area drain and including vehicle wash establishments, shall comply with these Regulations.
- (2) Where a sediment Interceptor or similar facility is installed or is required to be installed pursuant to subsection (1),
- (a) catch basins installed on private property for the purpose of collecting stormwater and carrying it into the storm sewers shall be equipped with an Interceptor, as required by the Commission;
  - (b) the installation of catch basins referred to in clause (a) shall comply with the Commission's Design and Construction Specifications, as amended from time to time;
  - (c) all sediment Interceptors shall be maintained in good working order by the owner or operator of the premises, according to the product manufacturer's recommendations and shall be inspected regularly to ensure performance of such Interceptors is maintained to the manufacturer's specifications for performance;
  - (d) removal of retained or trapped materials from a sediment Interceptor shall be accomplished by pumping or other physical means and the resulting recovered material shall not be Discharged to the Wastewater or Stormwater System;
  - (e) the owner or operator of a premises referred to in subsection (1) shall keep documentation respecting proof of the of the Interceptor clean-out and sediment disposal for a period of two years following generation of such a record; and
  - (f) a maintenance schedule and record of maintenance for each sediment Interceptor shall be available to the Commission upon its request.

## **PART XIII - MONITORING, SAMPLING AND REPORTING**

### Wastewater Service Reporting Requirements

- 73.(1) No person shall Discharge Wastewater, Stormwater, Non-contact Cooling Water, or any combination thereof, from an Industrial, Commercial or Institutional premises to the Wastewater System without first submitting to the Commission reports in a form prescribed by the Commission, known as Form 1: Abbreviated Discharger Information Report and Form 2: Detailed Discharger Information Report, and as amended from time to time.
- (2) A person who files reports with the Commission in Form 1 and Form 2 shall file further



reports in Form 1 and Form 2 as information contained in such Forms, as filed, changes.

- (3) The Commission may require additional information to that which is contained in either Form 1 or Form 2 at any time.

#### Wastewater Service Compliance Agreement

74.(1) The Commission may enter into a compliance agreement with a person who Discharges or intends to Discharge into a Wastewater System but who is not in compliance with these Regulations, for the purpose of having such person comply with these Regulations.

(2) A compliance agreement referred to in subsection (1) shall:

- (a) be for a fixed term;
- (b) contain requirements to report to the Commission on significant stages in a process for a person to comply with these Regulations;
- (c) include terms and conditions for Discharges into a Wastewater System during the term of such compliance agreement; and
- (d) include a termination clause providing for termination by the Commission where, in the opinion of the Commission, any party to a compliance agreement is not meeting the terms and conditions thereof.

#### Monitoring, Sampling, and Reporting

75.(1) The Commission may require a person to undertake monitoring, flow metering, or sampling and reporting to the Commission of any Discharge to a Wastewater System or Stormwater System on such terms and conditions as may be required by the Commission.

(2) All sampling and analysis conducted as part of monitoring referred to in subsection (1) shall be carried out in accordance with Standard Methods by an Accredited Laboratory at the expense of the person referred to in subsection (1).

#### Wastewater and/or Stormwater Service Sampling and Analytical Requirements

76.(1) Where the Commission requires sampling to determine the concentration of substances in Wastewater or Stormwater, the sample may

- (a) be collected manually or by using an automatic sampling device;
- (b) be collected by Grab Sample or Composite Samples; and
- (c) contain additives for its preservation.

(2) All sampling and analysis conducted as part of monitoring referred to in subsection (1) shall be carried out in accordance with Standard Methods and by an Accredited Laboratory.

### Wastewater and/or Stormwater Monitoring Access Point

77.(1) The Commission shall require the installation of a Monitoring Access Point or the upgrading of an existing Monitoring Access Point, for each connection to a Wastewater System or a Stormwater System for the purpose of monitoring, flow metering or sampling Discharges, unless exempted by the Commission.

(2) A Monitoring Access Point under this Section shall be

(a) located on the property of the person discharging into a Wastewater System or a Stormwater System, unless the Commission permits an alternate location;

(b) constructed and maintained at the expense of the person referred to in clause (a);

(c) accessible at all times by the Commission;

(d) constructed in a manner which meets the standards of the Commission;

(e) maintained to ensure access and structural integrity;

(f) offset behind the street line, unless otherwise approved by the Commission, or located on the property of the owner or operator of the premises, as close to the property line as possible, unless otherwise permitted by the Commission; and

(g) maintained so as to be free of buildup, deposits, or such other condition as may interfere with monitoring, flow metering or sampling.

### Releases

78.(1) In the event of a Release capable of having an Adverse Effect on a Water, Wastewater or Stormwater System or the environment, including the health of humans and reasonable enjoyment of life or property, the person having responsibility for or management or control of such Release or its source shall immediately notify the Commission and provide any requested information with regard to the Release.

(2) A person having responsibility, management or control of a Release referred to in subsection (1) shall report the occurrence of such Release as follows,

(a) If there is any immediate danger to human health and/or safety such person shall contact the Canadian Coast Guard at 426-6030 or 1-800-565-1633, Nova Scotia Environment at 1-877-936-8476 and the Commission at 311;

(b) If there is no immediate danger apparent to such person, that person shall contact the Commission at 311; and

(c) in either circumstance set out in clauses (a) and (b) hereof, such person shall contact the owner or occupant of the premises where the Release occurred.

- (3) The person referred to in subsection (1) shall take all reasonable measures to contain the Release, protect the health and safety of citizens, minimize damage to property, protect the environment, clean up the Release and contaminated residue, and restore the affected area to its condition prior to the Release.
- (4) The person referred to in subsection (1), or such other person with knowledge of the Release, shall, at the request of the Commission, provide a detailed report on the Release to the Commission within five working days after the request, containing, to the best of his or her knowledge, all of the following:
- (a) the location where the Release occurred;
  - (b) the name and telephone number of the person who reported the Release and the location and time where they can be contacted;
  - (c) the date and time of Release;
  - (d) the material Released;
  - (e) the characteristics and composition of material Released;
  - (f) the volume of material Released;
  - (g) the duration of Release event;
  - (h) the work completed and any work still in progress in the remediation of the Release;
  - (i) the preventive actions being taken to ensure a similar Release does not occur again;
  - (j) copies of applicable Release prevention and Release response plans for future events.
- (5) The Commission may invoice a person responsible for a Release to recover its costs of time, materials and services as a result of the Commission's response to the effect of such Release on the Commission's Water, Stormwater or Wastewater System, and such person responsible for a Release shall pay the Commission's costs as invoiced.

#### **PART XIV - OFFENCES**

##### Offences

79. Where the Commission believes that a person has contravened any provision of these Regulations, it may commence proceedings by issuing a Summary Offence Ticket in accordance with the Nova Scotia Summary Proceedings Act.

## **ATTACHMENT 1**

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### **HALIFAX REGIONAL WATER COMMISSION PROCEDURE FOR ACCEPTANCE OF PRIVATE COMMUNITY WATER, WASTEWATER AND STORMWATER SYSTEMS**

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#### **INTENT:**

This procedure sets out the requirements for the Halifax Regional Water Commission (the Commission) to accept existing private community water, Wastewater and Stormwater Systems into the Commission's plant.

#### **SYSTEM DEFINITION:**

A private community water, Wastewater or Stormwater System (a community system) is defined as an existing system serving at least ten (10) individual dwellings. The portion of the system eligible for acceptance by Halifax Water includes:

- The treatment plant(s) and/or pumping station(s) within the public road right of way, public easement or community system owned land, and
- The system pipes and appurtenances within the public road right of way or public easement, and
- The portion of the individual service laterals within the public road right of way or public easement.

The portion of the service lateral on private property shall remain the responsibility of the individual property owner.

Halifax Water will not consider acceptance of a standalone community stormwater system. Stormwater systems may be considered for acceptance as an ancillary part of an existing community wastewater system.

#### **INTRODUCTION:**

The Commission's infrastructure generally conforms to industry standards and the Commission Design and Construction Specifications. Further, Nova Scotia Environment (NSE) has published its Surface Water Treatment Standard and Groundwater Treatment Standard which identify the acceptable level of treatment for surface and ground waters, respectively. Existing Commission systems meet these standards. For a community system to be accepted into the Commission's plant, the Commission requires that the community system meets or can be upgraded to Commission and Federal/Provincial standards.

## **PROCEDURES FOR ACCEPTANCE:**

### **A. Pre-Qualification**

1. To qualify for consideration of acceptance and subject to all other conditions in this Procedure being met by the applicant, it must be demonstrated by the applicant that the community system will meet, or can be upgraded to meet, the following basic design standards:

#### Water System

- a) A reliable source of supply from a quantity point of view.
- b) Compliance with the NSE Groundwater Treatment Standard or Surface Water Treatment Standard, as applicable.
- c) Water meters for each individual customer, and individual service lines with shutoff valves.
- d) Adherence with the Commission's Design and Construction Specifications, where directly applicable.
- e) In addition to the appropriate Treatment Standard, adherence with the health and aesthetic parameters of the Guidelines for Canadian Drinking Water Quality.

#### Wastewater and Stormwater Systems

- a) Wastewater and Piped Stormwater Systems Compliance with all applicable Federal and Provincial legislation, regulations and requirements.
  - b) Adherence with the Atlantic Canada Wastewater Guidelines Manual for Collection, Treatment and Disposal.
  - c) Adherence with the Commission's Design and Construction Specifications, where directly applicable.
2. To qualify for consideration of acceptance, it must be demonstrated by the applicant that the Commission will have the ability to legally take over the system if all other conditions are met.
  3. If the above requirements in 1 and 2 above cannot be established, the community system cannot be accepted by the Commission, and the application will proceed no further.

### **B. Application for Acceptance**

If the requirements of 'A' have been met, the application for acceptance of the community system will be made by the community system customers. The cost of the application will be borne by the applicants. The application will consist of:

- a) A petition signed by two-thirds of the persons identified by the community system as its customers.
- b) The engineering drawings, as available.
- c) A System Assessment Report, conducted in accordance with NSE's Terms of Reference for System Assessment Reports, and sealed by a professional engineer.
- d) A pre-design report for all required upgrades to the system(s) to meet the Commission design standards including a detailed estimate of costs.

Note - The engineering drawings shall consist of:

- a) Record drawings for the water supply or wastewater treatment plant.
- b) Layout of the community showing the location of distribution and collection piping and services.
- c) Survey plan identifying property parcels and easements necessary for conveyance of the system to the Commission.

#### **C. Commission Board and NSUARB Approval**

With receipt of a complete and compliant Application for Acceptance, Commission staff shall prepare a report for recommendation of acceptance of the community system by the Commission Board. Subsequent to Commission Board approval, a request shall be sent to the NSUARB for approval of the community system acceptance.

#### **D. Transfer Agreement**

Subsequent to the approval of the NSUARB, an agreement will be executed with the applicant finalizing the transfer.

The terms and conditions of the agreement shall include:

- Requirement to design, construct and commission all required system upgrades by the applicant with all costs paid by the applicant.
- Upon completion of the required upgrade work at no cost to the Commission, certification from the applicant's engineer that all required upgrades have been completed to the required standards.
- Transfer of all assets of the community system, including any land or easements to the Commission with all costs paid by the applicant.

As an alternative mechanism for the payment of the upgrade costs, HRM Council may establish a betterment charge for the utility customers to collect the project costs.

Once the agreement with the applicant has been executed, betterment charge notices will be sent to all customers of the system. The amount of assessment will be based on equivalent units of a 15 mm water meter (or an equivalently equitable means for Wastewater Systems), with all utility customers being responsible for the total cost of the project.

The betterment charges shall be paid in accordance with the HRM Local Improvement By-law Policy and until payment is complete, shall constitute a lien against the property in respect to which the charges levied, as provided for in the Local Improvement By-law, subject to approval by HRM Council.

Upon completion of the project, staff will recommend to HRM Council that the betterment charges be levied.

When all conditions of the agreement have been met, including the full payment of all associated costs (including the final levying of any associated HRM betterment charge), the Commission will take formal ownership of the system(s) and establish customer contracts to provide Service.

**E. Rate Structure:**

The rate structure for newly accepted community systems will be based on full cost recovery with a cap at 2.5 times the actual urban core rates in effect.

## ATTACHMENT 2

### HALIFAX REGIONAL WATER COMMISSION

#### EXTRA STRENGTH WASTEWATER SURCHARGE FORMULA

The Extra Strength Wastewater Surcharge shall be based on the formulas in subsection (f) of this Attachment. The surcharge may apply to one or more of the parameters. Where more than one parameter applies, the surcharge shall be calculated for each parameter separately, and then added together to arrive at the total Extra Strength Wastewater Surcharge.

a) Surcharge Parameters

BOD<sub>5</sub>            Biochemical Oxygen Demand

TSS                Suspended Solids, Total

b) Limit Values

Surcharges shall be calculated based on the following limit values:

Parameter	Limit (mg/L)
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300
Suspended Solids, Total (TSS)	300

c) Rate

The Extra Strength Wastewater Surcharge rates are set out in subsection 23(2) of these Regulations.

d) Load

The value of the load shall be based on test results from the customer. The testing program to be used to arrive at the limit shall be approved by the Commission.

e) Flow

The flow will be the flow from the Customer measured at the location approved by the Commission. The measurement method and frequency shall be approved by the Commission.



### Extra Strength Wastewater Surcharge Formulas

The surcharge shall be calculated for each parameter using the following formulas:

<b>BOD<sub>5</sub> Surcharge</b>	<b>[Load (mg/L) - Limit (mg/L)] x [Flow (m<sup>3</sup>) x Rate (\$/kq)] / 1000</b>
<b>TSS Surcharge</b>	<b>[Load (mg/L) - Limit (mg/L)] x [Flow (m<sup>3</sup>) x Rate (\$/kq)] / 1000</b>

## **ATTACHMENT 3**

### **HALIFAX REGIONAL WATER COMMISSION**

### **WATER, WASTEWATER AND STORMWATER CAPITAL COST CONTRIBUTION POLICY**

#### **PART I:**

##### **Introduction**

The Water, Wastewater and Stormwater Capital Cost Contribution (WWS CCC) Policy provides for the recovery of costs required to provide oversized water, Wastewater and Stormwater infrastructure within a 'charge area'. The costs of providing this infrastructure are shared by developers, and in some cases, by the Commission. After the completion of a Master Plan Study, a charge area will be established that becomes the basis for the development of a WWS CCC Charge. The WWS CCC Charge shall take into consideration all aspects of the required infrastructure, financial risks to the Commission, timing of contributions, phasing of development and any other considerations that could have a financial impact on the Commission.

##### **Section 1: Master Plan Study Area & Charge Area**

- a) The Master Plan area and terms of reference for the study as it relates to the Commission must consider such factors as density, existing Water, Stormwater and Wastewater Systems, drainage basins, existing & proposed water service districts, service boundaries, land use development areas, soil conditions, topography, and other factors deemed appropriate. The Master Plan area is not constrained by land ownership.
- b) The charge area will generally be the Master Plan study area. However, depending on service considerations, the charge area may also include areas outside the Master Plan area.
- c) Oversized water, Wastewater and Stormwater infrastructure will be defined in the Master Plan for the charge area. Notwithstanding, the impact on existing or planned infrastructure outside the Master Plan study area will be taken into account in the Master Plan Study.

The Commission may require information from the developer(s) regarding the planning and system requirements in the preparation of the Master Plan.

##### **Section 2: Oversized Components**

- a) Oversizing components of a charge area may include, but are not necessarily limited to water distribution and transmission system including pumping stations, pressure reducing chambers and reservoirs, Wastewater collection system including pumping stations and stormwater collection systems including retention ponds. The infrastructure required to service a charge area may be located outside of the charge area and may include land

costs (including easements) associated with providing required infrastructure.

- b) Infrastructure which is exterior to a charge area, such as water and Wastewater treatment plants and related infrastructure may be included in the capital cost calculations. In any event, all costs of Oversized Infrastructure to provide service to the charge area will form part of the WWS CCC.

### Section 3: Oversized Infrastructure Required to Serve Future Developments

- a) Where oversizing of infrastructure within a charge area is identified as providing benefit to future development, the Commission may invest in the Oversized Water, Wastewater and Stormwater Infrastructure required for the future development.
- b) The oversizing required to service future development on lands adjacent the charge area, shall be determined, and the investment by the Commission shall be evaluated in accordance with the Funding Criteria defined in Section 18.

### Section 4: Drainage from Adjacent Lands

In a Master Plan Area, if drainage from adjacent lands requires the oversizing of storm sewers, the cost of providing the oversizing will form part of the WWS CCC for the charge area.

### Section 5: Oversized Infrastructure that Benefits Existing Developed Areas

- a) Where an existing developed area receives a direct service benefit from Oversized Water, Wastewater and Stormwater Infrastructure, the Commission may pay a share of the oversized system costs based upon the Capital Costs per acre. The Commission's share is not included in the WWS CCC recovered from new development within the charge area.
- b) The Commission will establish the extent to which the existing developed areas receive a benefit from Oversized Water, Wastewater and Stormwater Infrastructure. This benefit will be determined according to the procedures and guidelines of this Policy.
- c) Where system capacity provided by new infrastructure within a charge area is used by existing serviced areas, to a degree less than or equal to that existing system capacity used by the charge area, the Oversized Water, Wastewater and Stormwater Infrastructure required for the charge area will not be considered a benefit to the existing area.
- d) Existing developed areas may be excluded from a charge area if they are not included in the new infrastructure design calculation, or do not derive a direct benefit from these new systems.
- e) Where the Commission has contributed to existing developed areas contained in a charge area, the Commission may recover from WWS CCC from infilling or by way of rezoning, or subdivision, the Equivalent Capital Cost Contributions from new development within the existing community. In effect, the Commission may make payment of water, Wastewater

and Stormwater Capital Cost Contributions in advance for future development in existing areas and recover the contributions when new development occurs.

- f) The Commission's expenditures shall be evaluated in accordance with the Funding Criteria defined in Section 18, Funding Criteria.

#### Section 6: Upfront Payment of Oversized Infrastructure by the Commission

- a) To fulfill its leadership role, the Commission may consider it necessary to invest in the oversized and required water, Wastewater and Stormwater infrastructure in a charge area in advance of the revenue stream necessary to construct the systems.
- b) The Commission may also decide to facilitate the acquisition of rights-of-ways, land, and other required systems or facilities beyond the control of one or more developers. Commission investments shall be evaluated in accordance with the criteria determined in Section 18, Funding Criteria.

#### Section 7: Infrastructure Exterior to the Charge Area

- a) Oversized and required infrastructure exterior to the charge area will be included in the capital Oversized water, Wastewater and Stormwater Infrastructure for the charge area. The Commission will be required to accurately establish the Oversized Infrastructure that is attributed to a specific charge area.
- b) water, Wastewater or Stormwater facilities would only be included in the capital cost if their upgrade or expansion can be directly attributable to a specific charge area.

#### Section 8: Cost Estimates

- a) The basis for the WWS CCC is an estimate of the Oversized Infrastructure required to service the charge area. The estimated costs shall be escalated to account for the year in which the construction takes place and shall include interest during construction. The Commission will use the ENR Canada Indices to estimate costs in the future, in accordance with Section 14, Timing and Sequencing of Development. In addition, the Commission will include appropriate administration costs for the projects.
- b) The Commission, in consultation with the developers, will develop the cost estimates for Oversized water, Wastewater and Stormwater Infrastructure, both within and outside the charge area, that will form the basis of the CCC. The Commission will make every effort to establish cost estimates in consultation with the Stakeholders. The Commission may accept the developers' estimates to construct the systems if the developers agree to construct the Oversized water, Wastewater and Stormwater Infrastructure at the estimated cost.

#### Section 9: Cost Apportionment Criteria

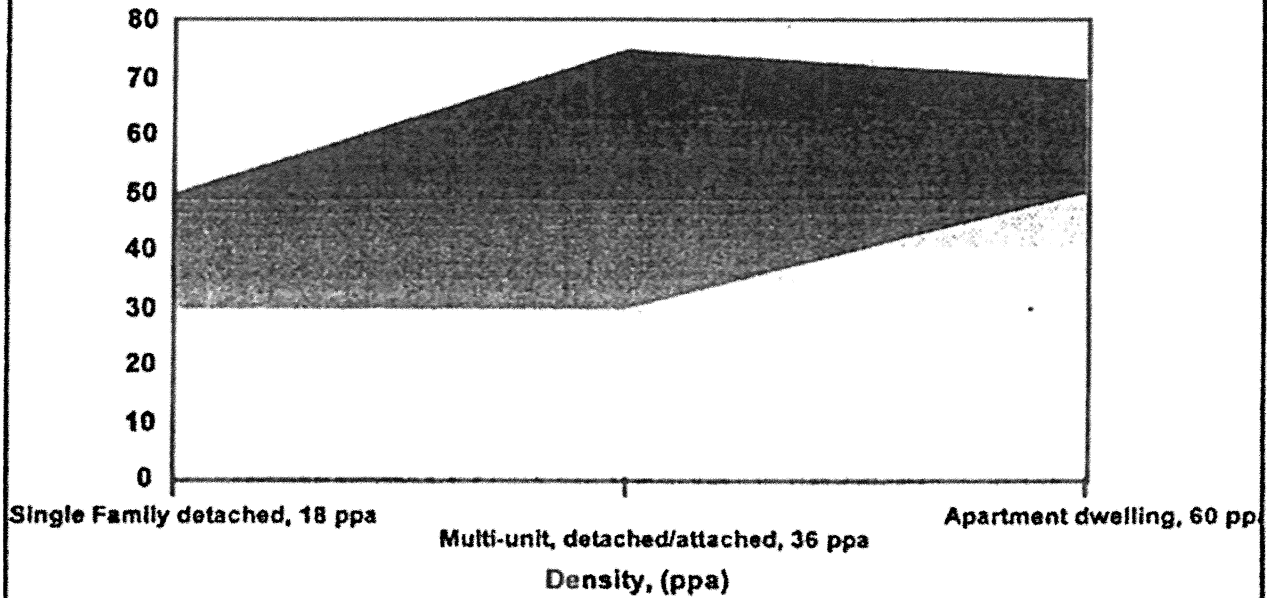
- a) The revenue stream arising from cost apportionment will be used in the Financial Plan of the charge area.
- b) For water, wastewater and stormwater infrastructure costs, a density factor related to system demand will be utilized to apportion costs.
- c) The WWS CCC is based on average density per acre for the entire charge area, adjusted for the actual density or land use within the parcel being subdivided. Actual density of the parcel being subdivided shall be determined at the time of Subdivision Approval using the maximum density which is permitted by the Municipal Planning Strategy or land use permitted by HRM's Land Use Bylaw.
- d) If the density in a sub-division is lower than the average, the WWS CCC may be accelerated based on the average, ratio amount until the total WWS CCC for the subdivision is collected from a developer. This process may be applied if cash flow requirements dictate more funds are needed to pay for required infrastructure.
- e) In Industrial, Commercial or Institutional zones or uses, the average density for the charge area will apply. The area of the parcel being developed will be adjusted to allow for multiple units or equivalent people.
- f) Stormwater Collection Systems are considered in the same manner as Wastewater systems. This approach implies there is a relationship between development density and the amount of Stormwater run-off which is generated. Given the accuracy and factor of safety inherent in estimating run-off, there is a direct relationship between density and run-off for Residential development. (Refer to Figure 1).
- g) Although the same relationship does not exist for Industrial, Commercial or Institutional uses, this policy accepts that apportioning Stormwater collection system costs on the basis of density is a reasonable, fair, and equitable approach. This approach is also supported by the fact that storm sewers often share the same trench as other services, and are administered in the same construction contract.
- h) The fairness and equity of this approach may be enhanced by implementing design specifications which require run-off levels to be maintained at residential levels. Such policies are easily implemented through the site design specifications.

Figure 1: Impervious Area vs Development Density

## Impervious Area vs Development Density

Percent Impervious Area, (%)

Based on: Hydrology, Federal Aviation Administration, HEC No. 19, 1984



### Section 10: Charge Area Boundary Changes

After a charge area has been established and phased development has commenced, there may be reasons to increase or decrease the charge area. The Commission may permit a change in the charge area based on the Oversized water, Wastewater and Stormwater Infrastructure capacity to provide service to the new area. Changes to charge area boundaries will be considered as either minor additions or major changes.

- a) A minor addition to a charge area may be considered when the infrastructure within the existing charge area is adequate to provide the required service to the additional area. All new development within the adjusted charge area boundary will pay WWS CCCs, based on the same charges that apply to the original charge area.
- b) A major change to a charge area is required when the proposed additional area cannot be adequately serviced by the existing infrastructure. New, Oversized water, Wastewater and Stormwater Infrastructure will be required and a new WWS CCC must be calculated. Capital costs collected from the original charge area will be applied to the funding of the new infrastructure.

Where a major change in the charge area is required, a revised Master Plan Study, a new charge area and corresponding WWS CCC will be calculated. These changes may require amendments to the Rules and Regulations or established Charge Area as per NSUARB to the charge area under consideration. Major changes may include expansion or extension of the charge area boundary or; a combination of two existing charge areas requiring a revision to the capital cost

contributions calculated from the area.

A developer in the original charge area will not be required to pay a WWS CCC which exceeds the amount calculated in the original charge area.

#### Section 11: Combined Charge Areas

Where two charge areas are adjacent and there are valid reasons to share some or all of the entire Oversized water, Wastewater and Stormwater Infrastructure, the Commission may combine the charge areas and recalculate the WWS CCC.

The Commission will determine the components of Oversized water, Wastewater and Stormwater Infrastructure that will be included in the new charge area. WWS CCC collected from the original charge area will be included in the new charge area, and they will be collected on a go forward basis.

#### Section 12: Cost Exceptions

Costs that will be deducted from the developers' portion of the WWS CCC include the following:

The proportion which is considered to benefit the existing Customers of the Commission, as determined in accordance with Section 5.

Commission investments in infrastructure for future development or another charge area determined in accordance with Section 3.

#### Section 13: Interest and Risk Mitigation

- a) The Commission supports new development; however, it is not prepared to accept the financial risk of new development. As a result, where the Commission decides to invest in the Oversized water, Wastewater and Stormwater Infrastructure before the required contribution is collected, interest will be added to the WWS CCC.
- b) In the event that a major component of infrastructure is required before the contributions are collected, the Commission may require the developers to assume the risk and invest in the infrastructure. The developer(s) would be subsequently reimbursed when CCCs are received by the Commission through continued development in the charge area.
- c)
  - (i) The WWS CCC shall be indexed by the Commission on July 1, 2012, and in each subsequent year on April 1, in accordance with the indexing set out in the Consumer Price Index for Halifax, as published by Statistics Canada for the immediately preceding month, when compared to the same month for the immediately preceding year.
  - (ii) If the Consumer Price Index calculated in (i) is negative, the WWS CCC will not be adjusted if the resulting CCC:

- A. is lower than the initial WWS CCC; or
  - B. results in a cash flow model that does not indicate a full recovery of capital costs within the time period specified in such model.
- d) The WWS CCC as indexed in clause (c) shall be:
- (i) Reduced to the next nearest dollar where it indicates a part of a dollar less than \$0.50; and
  - (ii) Increased to the next nearest dollar where it indicates a part of a dollar equal to or greater than \$0.50.
- e) The Commission will revise rates in accordance with the results of the application of calculation in clauses (c) and (d) and shall provide an annual information report of such results to the Board.

#### Section 14: Timing and Sequencing of Development

- a) The development phasing will be taken into consideration when designing and costing oversized infrastructure in the charge area. Since WWS CCCs are calculated on the basis of best estimates, reasonable and appropriate estimates must also be made in respect of development timing and corresponding cost escalators and interest rates that are dependent on the developers' schedule.
- b) The infrastructure capital cost estimate will be factored upwards to reflect prudent and appropriate cost escalators based upon interests and escalated cost of servicing, indicated through the ENR Canada index factor.
- c) The Commission will track and record all WWS CCC funds and expenditures. Interest will be charged when the account is in deficit and will be credited when the account is in surplus.
- d) The Commission may require significant components of infrastructure be built at a predetermined time frame; or based upon system demands or capacity loading arising from new or existing development. The significant components will be constructed within the time frame established by the Commission. As an example, the timing of a major interchange, pumping station or water reservoir which may be required and administered by an outside agency.
- e) The timing and sequence of development phasing may also have an impact upon the design capacity (or size) of infrastructure needed to provide adequate interim service standards throughout development stages in the charge area. It would be inappropriate for the Commission to approve the installation of services that did not adequately meet the design guidelines and minimum service standards to provide requisite services to its citizens.
- f) Additional Oversized water, Wastewater and Stormwater Infrastructure may be required at interim stages of the development as deemed appropriate by the Commission. Costs associated with interim infrastructure needed to advance the timing of the development



may not be included in the CCC costs if no benefit is achieved by the Commission.

- g) The Commission may require security (irrevocable, automatically renewing letter of credit) on the property when a development agreement has been approved by HRM, to indemnify the Commission in the event that the development does not proceed in the prescribed period of time. The amount of the lien will be equal to the WWS CCC that would have been collected from the area in question.
- h) The Commission will determine the sequence of oversized system construction, based upon information from the developer, and the requirements of the development. The Commission in consultation with HRM will determine the densities for each phase of the development in the charge area.
- i) The Commission may, in some cases, construct infrastructure prior to receiving the necessary WWS CCC; or require the developers to construct the Oversized water, Wastewater and Stormwater Infrastructure. Developers may be required to construct Oversized water, Wastewater and Stormwater Infrastructure in an earlier phase that will be used in latter phases of the development.

#### Section 15: Developers Acting as Contractors

- a) A developer may be allowed to construct some or all of the Oversized water, Wastewater and Stormwater Infrastructure based on the agreed upon estimates in compliance with the Commission's standards and guidelines. In most cases developers will be required to construct Oversized Systems in their development lands, but the Commission reserves the right to construct oversized or required infrastructure for the charge area.
- b) When the Developer is acting as a contractor, the Commission will inspect service system construction to ensure the system(s) meet Commission Design Guidelines. The developer will be required to build the infrastructure as required by the phased development determined in the Master Plan Study.
- c) Cost estimates for Oversized Systems and associated payment schedules will require a WWS Service Agreement to determine & implement WWS CCCs. The payment to the developer is based upon agreed cost estimates amongst the participating Stakeholders and approved by the Board.
- d) The Commission will inspect the system construction to ensure it meets its guidelines. The Developer will provide full inspection services and certification by a consultant for design compliance.

#### Section 16: Specific Infrastructure Components

- a) Specific components of Water, Wastewater and Stormwater Systems such as Wastewater pumping stations and Stormwater storage facilities will form part of the Capital Cost if they provide a Direct Benefit to more than one developer within the charge area. In this instance, the costs will be apportioned in accordance with the WWS CCC Policy using the appropriate design criteria, and may include land costs

- b) Components that provide only local benefits, and service a part of one development within the charge area, are solely the responsibility of the developer of the parcel.
- c) The Commission may require the developer who first requires a pumping station to build the Oversized Infrastructure and subsequently reimburse oversizing costs when the Commission has collected from future developments or apply a WWS CCC credit to the developer for the Oversized water, Wastewater and Stormwater Infrastructure investment.

## Section 17: Oversized Infrastructure Criteria

### a) Oversizing Criteria

The cost of providing Oversized water, Wastewater and Stormwater Infrastructure will be funded through the WWS CCCs levied in a charge area.

The cost of providing Oversized water, Wastewater and Stormwater Infrastructure may also include discrete upgrades of, or new connections to, existing systems outside of the charge area.

There are several methods of calculating the oversize cost, which generally fall into one of the following categories:

#### i. Incremental basis:

Where the oversize cost would be calculated by determining the incremental or marginal cost of up-sizing to the required Oversized water, Wastewater and Stormwater Infrastructure defined in the Master Plan. This method is most fairly applied if there is a base value or benefit associated with providing the minimum service requirements without considering oversizing. For the purpose of oversizing, minimum service requirements would be those necessary to provide service to an area being developed and may be based on minimum pipe sizes and local road standards.

#### ii. Flow Proportioning:

The incremental costs of the oversized component(s) in a Master Plan Area may be distributed amongst the land owners on a flow proportionate basis as determined by their allowable densities noted in the Municipal Planning Strategies or land use in the Land Use Bylaws.

#### iii. Capacity basis:

Where the oversize cost is determined on the basis of capacity allocated to the charge area. The cost to be recovered through a WWS CCC would be calculated by pro-rating total cost on the basis of capacity. This method is most fairly applied for a discrete upgrade of an existing system outside of the charge area.

### b) Water, Wastewater and Stormwater Systems within a Charge Area

The oversized costs to provide Water, Wastewater and Stormwater Systems within a charge area will be determined on an incremental basis. There are various methods for

calculating incremental costs of piped systems:

i. Dual Design Method:

Where the oversize cost is determined by deducting the total cost of the minimum required pipe size from the total cost of the oversized pipe.

ii. Cost Ratio Method:

This method assumes a direct relationship between the cost of providing a service and the size of the pipe. A cost factor can be determined and applied similar to the Cost Sharing Policy of the former City of Halifax, or a simple percentage based on nominal dimensions may be applied.

c) Infrastructure Exterior to a Charge Area

The portion of the cost of an upgrade, expansion, or provision of a discrete component of water, Wastewater and Stormwater infrastructure to be recovered through a WWS CCC will be determined on the basis of capacity allocated to the charge area.

Section 18: Funding Criteria

- a) Opportunity costs should be considered and calculated in an effort to prioritize the Commission's investment. These costs may be used to compare and contrast the investment potential in one charge area versus another request for funding. Opportunity costs may include consideration of existing system capacities, potential diversion of demand and capacity allocations, or mitigation of future capital expenditures arising from strategic Commission investments from a regional perspective. Other cost factors for consideration include treatment plants, trunk piping systems and other support services including operations and maintenance.
- b) The Commission in consultation with the HRM may opt to encourage development and growth in strategic areas by supporting Master Plan funding on a priority basis. The Commission may initially invest in comprehensive Master Plan studies where it wishes to promote growth and development optimizing use of existing systems and services.
- c) Inevitably, the demand for the Commission's and the HRM's contributions and investments for Capital Cost Contribution Policy may require priority decisions from the Commission's Board and Council. A balance of strategic master planning will mitigate future capital costs through good planning and optimized infrastructure utilization.
- d) The Commission may determine the risk too high in consideration of upfront payments for Oversized water, Wastewater and Stormwater Infrastructure. In this case, development may proceed if the developers build the required infrastructure. The developers may be given water, Wastewater and Stormwater Capital Cost credits to future contributions or may be re-paid when the Commission collects future WWS CCC from subsequent development utilizing these Oversized water, Wastewater and Stormwater Systems.

The requirement for security would reduce the risk to the Commission if development does not proceed. Time will be the essence of any agreement and may determine the type and condition

of the security required to mitigate the Commission's financial risk.

Section 19: WWS CCC Payment

The applicable WWS CCC shall be payable to the Commission at:

- a) the issuance of a subdivision approval; or
- b) where development is permitted to occur without a subdivision approval, prior to connection by the Commission of a water meter.

## **PART II:**

### WWS CCC Policy Templates

The capital cost templates and supporting notes will be used to calculate Water, Wastewater and Stormwater Capital Cost Contributions.

## **WATER, WASTEWATER AND STORMWATER CAPITAL COST CONTRIBUTION FORMULAS**

<b>Water, Wastewater and Stormwater</b>		
A	Total cost of Oversized Infrastructure and other required infrastructure (Wastewater, Stormwater)	
B	Total cost of Oversized Infrastructure and other required infrastructure( water)	
C	Interest during construction	
D	Total cost of infrastructure	(A + B + C)
E	Deduct infrastructure that benefits the Commission	
F	Deduct fire protection charges paid by the HRM - From water Infrastructure only (Item "B" above)	
G	Total Capital Cost Contribution	(D - E - F)
H	Gross area (acres) in charge area	
I	Area of land that cannot be developed	
J	Area of land that can be developed	(H - I)
K	Development charge per acre	(G / J)
L	Average Density (ppa) of charge area	

<b>Adjustments for Density of the Parcel being Subdivided</b>		
M	Area of Parcel Being Subdivided	
N	Density (ppa) for parcel being subdivided	
O	Capital Cost Contribution per Acre	K x (N / L)
P	Total Capital Cost Contribution	O x M

### Notes to Capital Cost Formula

1. The cost of Oversized Infrastructure and other required infrastructure is based on an estimate of construction that includes engineering design. Other items to be included are planning studies, land purchases, surveying costs, legal costs and Commission audit inspection costs. The costs will be escalated based on the ENR index to the year costs are incurred for each component of the infrastructure.
2. The interest rate shall be the prime bank rate plus one percent. The construction period is assumed to be two years.
3. Benefits to the Commission may include infrastructure costs that benefit the existing population of the Commission.
  - a) If there is an area within the charge area that benefits the Commission and the Commission pays a portion of the oversized and other infrastructure costs, any vacant land within the area that is developed shall pay a WWS CCC equal to cost per acre paid by the Commission.

4. The fire protection charge paid by HRM to the Commission is a percentage of the cost of the oversized water related infrastructure. The current 29% has been calculated based on the fire protection component of the demand assets of the utility as contained in the current rate study. Future rate studies may result in a change in the percentage.
5. Gross area includes all land, including streams and lakes within the charge area.
6. Area that cannot be developed will include streams, lakes, flood plains and any other land deemed non-developable by the Commission.
7. Average density shall be established by the Commission or HRM.
8. For Industrial, Commercial or Institutional uses with multiple storeys, the area of the parcel being sub-divided shall be increased by an amount equal to the *allowable* floor space of the additional storeys.

For the purpose of this calculation, underground parking is considered an additional storey.

9. Development of a parcel of land within a charge area that has density below the average may be required to accelerate contributions on the basis of the average density, until the total required WWS CCC for the original parcel has been made.

For Industrial, Commercial and Institutional uses, density shall be taken as the average density for the charge area.