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The Regional Municipality of Durham Report

To: The Committee of the Whole
From: Commissioner of Finance and Commissioner of Works
Report: #2016-COW-83
Date: December 7, 2016

Subject:

Recommended 2017 Water and Sanitary Sewer User Rates

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) The 2017 Regional water rates increase 4.9% and Regional sanitary sewer rates increase 2.3% from the 2016 user rate levels as set out in Schedule 1 and Schedule 2 respectively (attached), effective January 1, 2017 (increase for an average residential customer of 3.6%);
- B) The 2017 Raw Water rates for the Whitby raw water customers be as set out in Schedule 1 (attached), effective January 1, 2017;
- C) The 2017 water charges to the Sun Valley Heights Homeowners Co-operative Water System be as set out in Schedule 3 (attached), effective January 1, 2017;
- D) The 2017 Regional Water and Sanitary Sewer Systems Miscellaneous Fees and Charges be as set out in Schedule 4 (attached), effective January 1, 2017;
- E) The 2017 fee schedule for laboratory services at the Regional Environmental Laboratory located at the Duffin Creek Water Pollution Control Plant be as set out in Schedule 5 (attached), effective January 1, 2017;
- F) The Regional Solicitor be instructed to revise or prepare the necessary by-laws to implement the foregoing recommendations.

Executive Summary

1. Background

- This report relates to the recommended Water and Sanitary Sewer User Rates to be effective January 1, 2017. It is presented concurrently with and supports Report #2016-COW-82: 2017 Water Supply and Sanitary Sewerage Servicing and Financing Study which describes the financing of proposed capital works in 2017 and future years.
- This printed Executive Summary is supplemented by a Detailed Report available in the attached booklet.
- The Region's water and sanitary sewer user rates are reviewed annually and recommendations are made to Council in December, prior to a January 1st implementation of approved user rates.
- It is imperative that user rates be approved in 2016 in order that they can be implemented with the first customer billings commencing early January 2017. Any delay in implementation may mean that any required rate increase would have to be larger to generate sufficient revenue during the Region's fiscal year. In addition, it is considered preferable to adjust the rates during the low winter consumption period rather than have a rate increase occur at the same time as the spring/summer seasonal usage increase.
- Public notification that the proposed 2017 water and sanitary sewer user fees and related charges will be considered by the Committee of the Whole on December 7th, and by Regional Council on December 14th, was provided twice in local newspapers throughout the Region from November 17th to November 24th, 2016 and was posted on the Region's website.

2. Highlights

2.1 2017 Recommended Water and Sanitary Sewer User Rate Increases

- The recommended 4.9% water user rate increase and 2.3% sanitary sewer user rate increase (3.6% combined for an average residential customer) supports an increase in user rate expenditures of 6.0% for water and 3.4% for sewage. The current 2016 and recommended 2017 Water and Sanitary Sewer User Rates are provided in Schedule 1 and Schedule 2 respectively (attached).
- For water, the user rate increase of 4.9% is required to finance a proposed preliminary 2017 user rate supported budgeted expenditure increase of \$5.76 million or 6.0% over 2016, which, will allow for:
 - **A net *Operating Cost* increase of \$1.47 million due mainly to increases in utility costs, watermain repair budget (cathodic protection) and inflationary and economic increases;**
 - **A *Capital Program/Contribution* increase of \$4.29 million (user rate share) due mainly to advancing capital projects related to the federal government Clean Water and Wastewater Fund.**

- For sanitary sewer, the user rate increase of 2.3% is required to finance the proposed preliminary 2017 user rate supported budgeted expenditure increase of \$3.26 million or 3.4% over 2016, which will allow for:
 - **A net *Operating Cost* increase of \$1.31 million due to utility costs and inflationary and economic costs;**
 - **A *Capital Program/Contribution* increase of \$3.42 million (user rate share) due mainly to advancing capital projects related to the federal government Clean Water and Wastewater Fund; and**
 - **A *Debt Repayment* decrease of \$1.47 million or -14.3% related to the retirement of the Courtice Water Pollution Control Plant (WPCP) debt.**

2.2 Basis for the Proposed 2017 User Rates

- The projected data used to develop the 2017 user rates includes the following:

Projected Data Used to Develop 2017 Water & Sewage User Rates

Parameter	Water	Sanitary Sewage
Customers		
- Number	174,305	170,161
- Growth from 2016 Actual	1.30%	1.35%
Consumption/Flow		
- Gallons (billions)	11.64	11.19
- Cubic metres (millions)	52.91	50.88
- Change from 2016 Budget	0.9%	0.9%
Projected User Rate Supported Expenditures		
- Total Expenditures	\$101,494,900	\$97,897,800
- Change from 2016 Budget	6.0%	3.4%
User Rate Change Required		
- Percent	4.9%	2.3%
- Impact on Revenue of 1% Rate Change	\$967,000	\$956,000

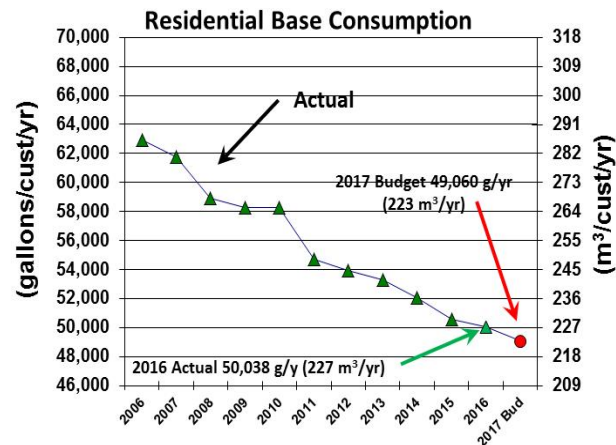
- **Impact of a 1% Rate Change** - Any change in either expenditures or other revenues by \$967,000 for water or \$956,000 for sanitary sewer is equivalent to a 1% change in the respective user rate.

2.3 Customer and Consumption Projections

- Customer growth in 2017 is projected at 1.30% for water and 1.35% for sanitary sewage.
- Total water consumption and billed sewage flows budgeted for 2017 are 0.9% higher for both water and sanitary sewage than budgeted in 2016.

- **Overall** – Total billed water consumption and sewage flows are projected to marginally increase in 2017. The consumption increase is due to residential growth volumes consumption in the non-residential sectors remaining stable.

- **Residential** – Base residential per customer water consumption (excludes seasonal usage) has been steadily decreasing. Contributing factors include the water efficient fixtures required in new construction by the Provincial Building Code and the popularity of more water efficient appliances. Actual 2016 base consumption decrease of 2.8% is in line with historic reductions (average annual 2005 to 2016 decrease was 2.6%). Continuing reduction in base usage per residential customer is expected for 2017 and into the future.



However, with seasonal usage and a 1.3% increase in customers included, total residential consumption is projected to increase by 1.2% in 2017.

- **Non-Residential Consumption Share** – After years of decrease, the Industrial, Commercial and Institutional (ICI) consumption share relative to residential usage is expected to remain stable at 26% in 2017. In the early 1980's, ICI represented 59% of all water usage.
- **Small to Medium Size ICI Water Users** – Consumption has been fairly stable in the 1st and 2nd ICI consumption blocks. No change is projected for 2017.
- **Large Water Users** – 3rd block ICI water usage has been declining for many years due to conservation, water recycling and scaling back or closing of large manufacturing operations. However, the reopening of a paper fibre production operation in mid-2013 (curtailed in spring of 2010) has resulted in an increase in large customer consumption, which in 2016 has levelled off. As a result, 2017 projected 3rd block consumption is the same as the 2016 budget.

2.4 Impacts on Water and Sewer Customers

- Average Residential Customers – The recommendation that the 2017 water and sanitary sewer user rates be increased over 2016 rate levels results in an increase of \$7.93 or 3.6% in the quarterly charge (\$31.72 per annum or \$2.64 per month) to a residential customer using 230 m³ (50,500 gallons) per year. This reflects the average volume of water projected to be used annually in 2017 by a residential customer.

2017 Proposed Regional User Rate Charges				
Typical Residential Customer Impact				
	Water	50,500	gallons/year	
	Usage	230	m ³ /year	
Billings (\$/quarter)				
	2016	2017		
	Actual	Proposed	Increase	
	\$	\$	\$	%
Water	107.51	112.78	5.27	4.9%
Sewage	115.85	118.51	2.66	2.3%
Total (\$/quarter)	223.36	231.29	7.93	3.6%
Annual Billing (\$/year)	893.44	925.16	31.72	3.6%

It is projected that in 2017, the average annual residential per customer consumption (including base and summer usage allowance combined) will remain the same at 230 m³ (50,500 gallons)

- Industry - The proposed 2017 water and sanitary sewer user rates result in a bi-monthly increase of \$2,652 for a customer using 227,272 m³ (50,000,000 gallons) annually (a customer in the top 25 users) as indicated below:

2017 Proposed Regional User Rate Charges				
Large Industrial Customer Impact				
	Water	50,000,000	gallons/year	
	Usage	227,272	m ³ /year	
Billings (\$ bimonthly)				
	2016	2017		
	Actual	Proposed	Increase	
	\$	\$	\$	%
Water	31,212	32,740	1,528	4.9%
Sewage	49,060	50,184	1,124	2.3%
Total (\$ bimonthly)	80,272	82,924	2,652	3.3%
Annual Billing (\$/year)	481,632	497,544	15,912	3.3%

2.5 Competitiveness of Durham's Water and Sewage Rates

- **Residential customers** - Of 13 larger municipalities surveyed across Ontario, Durham's 2016 Regional water and sewage charges are below average and are the 5th lowest.
- **Large users** - The Region's 2016 water and sewer rates were the 4th lowest of the 13 municipalities surveyed for a large user. The Region's declining block rates reflect the Region's reduced unit cost of servicing large customers.
- **Other Utilities** - Regional water and sewer charges for an average residential customer are each substantially less than other utilities such as natural gas, hydro, telephone and cable.

2.6 Miscellaneous Fees & Charges and Laboratory Fees

- **Miscellaneous Fees & Charges** - Schedule 4 Recommended 2017 Water & Sanitary Sewer Systems Miscellaneous Fees & Charges includes 40 fee categories. Each has been reviewed individually. Most of the recommended 2017 charges increases vary from no increase to about 5%. Specific considerations and circumstances warrant changes to the following fees and charges:
 - **Items 1) to 14) Water & Sanitary Sewer Systems Frontage & Connection Charges** – An analysis of 2014 actual frontage costs indicates these fees should be substantially increased in order to achieve full cost recovery with the increases phased in over a 3-year (2016 to 2017) period. The first two phases were implemented in the 2015 & 2016 Miscellaneous Charges. The originally planned 2017 completion of the phase in has been extended in order to lessen the impact and in order to further phase in the frontage charges. The recommended 2017 charges represents an increase of 5% over 2016 charges.
 - **Item 18) Unmetered Water used for construction (building purposes) per service** – The volume of water used during home or building construction up until completion and meters are installed, typically during subdivision construction, is charged to builders by means of the building purposes charge. The charge is levied based on number of water services being built. It covers water usage until meters are installed. Water meters are not installed in new house construction until it is virtually complete and meter freezing is not an issue. Currently the charge is \$87.00 which is equivalent to about 87 m³ (19,200 gallons) of water usage per water service. An initial investigation indicates water usage could be upwards of 200 m³ (44,000 gallons) per home or more. Monitoring of development sites will continue. In the meantime an increase in the allowance to 110 m³ (24,200 gallons) (\$110.00) per home equivalent based on current water rates is recommended (see also Section 6.5).
- **Laboratory Fees** – Schedule 5 Recommended 2017 Fee Schedule for Laboratory Services at the Regional Environmental Laboratory located at the Duffin Creek WPCP includes 9 pages of individual fees for a variety of tests. There have been six (6) fees increased. Two (2) new tests added, three (3)

fees eliminated and two (2) changed from a fixed rate to external subcontractor's rate.

2.7 Risk Factors

- The water and sanitary sewer user rate forecasts to 2026 include preliminary cost estimates for known projects and in some cases only allowances have been made until detailed designs are complete. However, there are other factors that will have cost implications which are unknown at this time and have not been quantified. The factors that will put additional pressures on future user rates include:
 - Potential for further reductions in water usage and thus related revenues without resulting in corresponding cost reductions;
 - Any further economic decline could result in lower system utilization with consequent decrease in water and sewage user rate revenues;
 - Market price impacts and volatility, including energy input prices and related equipment and supplies; and
 - There also may be unknown cost implications as a result of new legislation and current regulations as well as future amendments, related to Bill 72, the *Water Opportunities and Water Conservation Act*, the *Clean Water Act* (Source Protection Plans), the *Lake Simcoe Protection Act*, the *Great Lakes Protection Act* and the *Wastewater Systems Effluent Regulations* (WSER). This legislation is discussed in detail in Report #2016-COW-82: 2017 Water Supply and Sanitary Sewerage Servicing and Financing Study.

3. Future Issues

- Based upon projections to 2026, it is estimated that the combined water and sewer user rate increase will be approximately 5% to 7% per year over the forecast period depending on future customer growth, water demand and financial planning decisions. The cost factors behind these significant increases include the following:
 - Customer growth has recently been lower than experienced for a number of years and is projected to remain at low levels;
 - Water consumption has trended downwards in the past few years and this is expected to continue. Residential customer water usage is expected to be fairly level with consumption growth due to increases in the number of customers offset by reduced day-to-day individual customer use, due to more efficient plumbing fixtures and appliances and awareness of water conservation practices. Usage by small to medium-sized customers is expected to remain fairly constant. The long-term usage trend by large industrial customers is projected to stabilize;

- Operating costs are expected to increase at an annual rate of 4% or more due mainly to economic and inflationary increases in utilities, chemicals, and supplies;
 - Water supply and sanitary sewerage infrastructure require large capital investments in order to meet regulatory, asset management and growth related requirements, in particular for treatment plant and trunk main services. In addition, the forecast debt servicing costs are projected to increase; and
 - Water and sewage user rates are the funding source for capital investments for rehabilitation and replacement as well as growth (net of development charge contributions and grants, if available).
- Total and user rate share of major water and sewage systems capital projects over the forecast period (2017-2026) are discussed in detail in Report #2016-COW-82: 2017 Water Supply and Sanitary Sewerage Servicing and Financing Study.

4. Schedules of Rates & Fees

- The recommended Durham Region 2017 water and sanitary sewer user rates, fees and charges are set out in the attached schedules, as follows:
 - The recommended 2017 Water User Rates are 4.9% higher than the 2016 rates and are set out in Schedule 1.
 - The recommended 2017 Raw Water Rate for the Whitby raw water customers is set out in Schedule 1.
 - The recommended 2017 Sewage User Rates are 2.3% higher than the 2016 rates and are set out in Schedule 2.
 - The recommended 2017 Water Rate for the Sun Valley Heights Homeowners Co-operative Water System is set out in Schedule 3.
 - The recommended 2017 Water & Sanitary Sewer Systems Miscellaneous Fees & Charges (adjusted to reflect changes in cost structures and inflation) are set out in Schedule 4.
 - The recommended 2017 Fee Schedule for Laboratory Services at the Regional Environmental Laboratory located at the Duffin Creek WPCP is set out in Schedule 5.

5. Attachments

Schedule 1 – Recommended 2017 Water User Rates

Schedule 2 – Recommended 2017 Sewage User Rates

Schedule 3 – Recommended 2017 Water Rate for the Sun Valley Heights Homeowners Co-operative Water System

Schedule 4 – Recommended 2017 Water & Sanitary Sewer Systems Miscellaneous Fees & Charges

Schedule 5 – Recommended 2017 Fee Schedule for Laboratory Services at the Regional Environmental Laboratory Located at the Duffin Creek WPCP

6. Detailed Report – Provided in enclosed booklet

Original signed by

R.J. Clapp, CPA, CA
Commissioner of Finance

Original signed by John Presta for

Susan Siopis, P.Eng.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW
Chief Administrative Officer

Schedule 1 Recommended 2017 Water User Rates

REGIONAL MUNICIPALITY OF DURHAM							
Water User Rate Schedule				2017 Rate Increase = 4.9%			
Monthly							
Effective January 1, 2017							
Volumetric Charges							
Block	Consumption Range			Current 2016		Proposed 2017	
	From	To	Units				
First Block	0	to 45	cubic metres/month	\$0.997	/cubic metre	\$1.045	/cubic metre
	0	to 10,000	gallons/month	\$4.530	/1,000 gallons	\$4.752	/1,000 gallons
	0	to 1,600	cubic feet/month	\$2.822	/100 cubic feet	\$2.960	/100 cubic feet
Second Block	46	to 4,500	cubic metres/month	\$0.847	/cubic metre	\$0.889	/cubic metre
	10,001	to 1,000,000	gallons/month	\$3.852	/1,000 gallons	\$4.041	/1,000 gallons
	1,601	to 160,000	cubic feet/month	\$2.400	/100 cubic feet	\$2.518	/100 cubic feet
Third Block		Over 4,500	cubic metres/month	\$0.778	/cubic metre	\$0.816	/cubic metre
		Over 1,000,000	gallons/month	\$3.537	/1,000 gallons	\$3.710	/1,000 gallons
		Over 160,000	cubic feet/month	\$2.204	/100 cubic feet	\$2.311	/100 cubic feet
Basic Charges (\$/month)							
Meter/Fire Line Size		Service Charge		Minimum Charge		Unmetered Fire Line Charge	
		Current 2016	Proposed 2017	Current 2016	Proposed 2017	Current 2016	Proposed 2017
Inches	mm						
Standard	Standard	\$16.75	\$17.57	n/a	n/a	n/a	n/a
1-inch	25-mm	\$34.03	\$35.70	\$57.00	\$59.00	\$12.93	\$13.56
1 ½-inch	38-mm	\$72.44	\$75.99	\$109.00	\$114.00	\$17.38	\$18.23
2-inch	51-mm	\$156.45	\$164.12	\$209.00	\$220.00	\$33.64	\$35.29
2 ½-inch	64-mm	n/a	n/a	n/a	n/a	\$44.59	\$46.77
3-inch	76-mm	\$275.01	\$288.49	\$359.00	\$376.00	\$59.10	\$62.00
4-inch	102-mm	\$546.85	\$573.65	\$708.00	\$742.00	\$118.22	\$124.01
5-inch	127-mm	n/a	n/a	n/a	n/a	\$158.73	\$166.51
6-inch	152-mm	\$1,016.35	\$1,066.15	\$1,293.00	\$1,356.00	\$218.29	\$228.99
8-inch	203-mm	\$1,732.66	\$1,817.56	\$2,125.00	\$2,229.00	\$363.74	\$381.56
10-inch	254-mm	\$2,819.52	\$2,957.68	\$3,366.00	\$3,531.00	\$580.42	\$608.86
12-inch	305-mm	n/a	n/a	n/a	n/a	\$818.36	\$858.46
Flat Rate (includes consumption)							
		Current 2016	Proposed 2017				
Monthly/unit		\$39.40	\$41.33				
Quarterly/unit		\$118.20	\$123.99				
Annually/unit		\$472.80	\$495.96				
Other - Raw Water Rate							
			Current 2016	Current 2017			
All volumes			\$0.270	\$0.286			
			/cubic metre	/cubic metre			
			\$1.225	\$1.300			
			/1,000 gallons	/1,000 gallons			
Late payment charge is 2%. A bill payment is late if not made within 16 days of the date on which the bill is mailed.							

Schedule 2 Recommended 2017 Sewage User Rates

REGIONAL MUNICIPALITY OF DURHAM							
Sewage User Rate Schedule				2017 Rate Increase = 2.3%			
Monthly							
Effective January 1, 2017							
Volumetric Charges							
Block	Consumption Range			Current 2016		Proposed 2017	
	From	To	Units				
First Block	0	to 45	cubic metres/month	\$1.674	/cubic metre	\$1.712	/cubic metre
	0	to 10,000	gallons/month	\$7.608	/1,000 gallons	\$7.783	/1,000 gallons
	0	to 1,600	cubic feet/month	\$4.740	/100 cubic feet	\$4.849	/100 cubic feet
<i>Sewer rate expressed as a % of water rate</i>				167.9%		163.8%	
Second Block	46	to 4,500	cubic metres/month	\$1.473	/cubic metre	\$1.507	/cubic metre
	10,001	to 1,000,000	gallons/month	\$6.695	/1,000 gallons	\$6.849	/1,000 gallons
	1,601	to 160,000	cubic feet/month	\$4.171	/100 cubic feet	\$4.267	/100 cubic feet
<i>Sewer rate expressed as a % of water rate</i>				173.8%		169.5%	
Third Block		Over 4,500	cubic metres/month	\$1.238	/cubic metre	\$1.266	/cubic metre
		Over 1,000,000	gallons/month	\$5.627	/1,000 gallons	\$5.756	/1,000 gallons
		Over 160,000	cubic feet/month	\$3.506	/100 cubic feet	\$3.586	/100 cubic feet
<i>Sewer rate expressed as a % of water rate</i>				159.1%		155.1%	
Basic Charges (\$/month)							
Meter	Service Charge		Minimum Charge		Flat Rate/unit		
	Current 2016	Proposed 2017	Current 2016	Proposed 2017	Current 2016	Proposed 2017	
Standard	\$6.56	\$6.71	No minimum charge		\$44.60	\$45.63	
All other sizes							
Monthly	\$6.56	\$6.71	\$45.00	\$46.00	\$44.60	\$45.63	
Quarterly	\$19.68	\$20.13			\$133.80	\$136.89	
Annually	\$78.72	\$80.52			\$535.20	\$547.56	
Late payment charge is 2%. A bill payment is late if not made within 16 days of the date on which the bill is mailed.							

Schedule 3 Recommended 2017 Water Rate for the Sun Valley Heights Homeowners Co-operative Water System

Sun Valley Home Owners Co-Op 2017 Projected Costs

Cost Item	Budget	Projected Cost
	2016	2017
	\$	\$
Hydro Electricity	1,900	2,200
Property Taxes	309	320
Laboratory Costs	2,255	2,255
Vehicle	2,870	2,870
Operator & Reports	15,290	15,580
Operation Materials	2,600	2,600
Maintenance Materials & Other	600	600
Machinery and Equipment	1,550	1,550
TOTAL	27,374	27,975
Cost Per Customer to the 17 Property Owners (Billings Sent Quarterly)		
Monthly (\$/month)	\$134	\$137
Annual (\$/year)	\$1,608	\$1,644

Schedule 4 Recommended 2017 Water & Sanitary Sewer Systems Miscellaneous Fees & Charges

THE REGIONAL MUNICIPALITY OF DURHAM

WATER & SANITARY SEWER SYSTEMS MISCELLANEOUS CHARGES

(Excludes Any Applicable Taxes – except where noted)

Schedule 4 - Recommended 2017 Miscellaneous Charges	By-Law Schedule Reference		Existing 2016 Charges		Recommended 2017 Charges
	Water By-law #89- 2003	Sewer By-law #90- 2003	Water \$	Sewer \$	Note: Changes are in Bold \$
Item Number & Description					
SERVICE CONNECTION RELATED CHARGES					
1) Water Service Connection Charges, for single family and semi-detached residential lots including those for pre-installed stubs: a) 19mm (3/4") diameter - Base Rate – Apr 1 – Nov 30 - Winter Rate – Dec 1 – Mar 31 b) 25mm (1") diameter - Base Rate – Apr 1 – Nov 30 - Winter Rate – Dec 1 – Mar 31	D1		3,185.00 4,174.00		3,344.00 4,383.00
2) Water Service Connections, not covered above, including apartment buildings (from duplexes to multi floor buildings), townhouses and condominiums on blocks of land or recreational, institutional, commercial and industrial buildings: a) 19-mm (3/4") diameter minimum charge b) 25-mm (1") diameter minimum charge	D2		Actual Cost 3,185.00 3,715.00		Actual Cost 3,344.00 3,901.00
3) Inspection of an installation of a separate fire line on private property	D3		119.00		125.00
4) Sanitary Sewer Service Connection Charges for single family and semi-detached residential lots for pre-installed stubs 100 or 125mm (4" or 5") diameter: - Base Rate (Apr 1 – Nov 30) - Winter Rate (Dec 1 – Mar 31)		C1		3,660.00 4,767.00	3,843.00 5,005.00
5) Sanitary Sewer Service Connections, not covered above, including apartment buildings (from duplexes to multi-floor buildings), townhouses and condominiums on blocks of land or recreational, institutional, commercial and industrial buildings: - Minimum Charge		C2		Actual Cost 3,660.00	Actual Cost 3,843.00
6) Storm Sewer Service Connections: - Minimum Charge		C3		Actual Cost 3,660.00	Actual Cost 3,843.00

Schedule 4 - Recommended 2017 Miscellaneous Charges Item Number & Description	By-Law Schedule Reference		Existing 2016 Charges		Recommended 2017 Charges
	Water By-law #89- 2003	Sewer By-law #90- 2003	Water \$	Sewer \$	Note: Changes are in Bold \$
7) Reuse of Water/Sewer Service Connection where building has been or will be demolished or removed: - Inspection fee	D4	C4		119.00 for both	125.00 for both
- Where a disused Water/Sewer Service Connection is to be replaced by the Region			See above service connection charges		
8) Disconnecting, rendering inoperable, reconnecting or restoring Water/Sewer connection	D5	C5	Actual Cost		Actual Cost
FRONTAGE CHARGES (see Notes 1 to 5)					
9) Standard 150-mm (6-inch) diameter Watermain (Note 3)	E1 & E2				
i) Cash cost (standard)					
- /metre			282.00		296.00
- /foot			85.95		90.22
ii) Per annum (see Note 2)					
- /metre		38.31		40.22	
- /foot		11.68		12.26	
10) Standard 200-mm (8-inch) diameter Watermain	E1 & E2				
i) Cash cost (standard)					
- /metre			328.00		344.00
- /foot			99.97		104.85
ii) Per annum (see Note 2)					
- /metre		44.56		46.74	
- /foot		13.58		14.25	
11) Standard 300-mm (12-inch) diameter Watermain	E1 & E2				
i) Cash cost (standard)					
- /metre			363.00		381.00
- /foot			110.64		116.13
ii) Per annum (see Note 2)					
- /metre		49.32		51.77	
- /foot		15.03		15.78	
12) Standard 200-mm (8-inch) diameter Sanitary Sewer (Note 3)		D1 & D2			
i) Cash cost (standard)					
- /metre				315.00	331.00
- /foot				96.01	100.89
ii) Per annum (see Note 2)					
- /metre			42.80	44.97	
- /foot			13.04	13.71	
13) Standard 250-mm (10-inch) diameter Sanitary Sewer		D1 & D2			
i) Cash cost (standard)					
- /metre				360.00	378.00
- /foot				109.73	115.21
ii) Per annum (see Note 2)					
- /metre			48.91	51.36	
- /foot			14.91	15.75	

Schedule 4 - Recommended 2017 Miscellaneous Charges Item Number & Description	By-Law Schedule Reference		Existing 2016 Charges		Recommended 2017 Charges
	Water By-law #89- 2003	Sewer By-law #90- 2003	Water \$	Sewer \$	Note: Changes are in Bold \$
14) Standard 300-mm (12-inch) diameter Sanitary Sewer i) Cash cost (standard) - /metre - /foot ii) Per annum (see Note 2) - /metre - /foot		D1 & D2		401.00 122.22 54.48 16.61	421.00 128.32 57.20 17.43
Note (1) – Customers requiring non-standard main sizes charged actual cost.					
Note (2) – Basis of per annum charges: Repayment period = 10 years Annual Interest rate = 6%					
Note (3) – Residential frontage charges to be assessed on the basis of a standard 150-mm (6-inch) diameter watermain and a standard 200-mm (8-inch) diameter sanitary sewer.					
Note (4) – Any frontage charges for non-standard main sizes, or any extraordinary circumstances, be assessed by the Commissioners of Finance and Works on a case by case basis to ensure full recovery.					
Note (5) – Rate may vary if estimated construction costs vary significantly from the rates noted above.					
MISCELLANEOUS CHARGES					
15) <u>Water Shut Off/Turn On</u> Initiated by Customer: During normal Regional working hours: - Shut Water Off - Turn Water On - Shut Off & Turn On During Same Call After normal Regional working hours: - Shut Water Off - Turn Water On - Shut Off & Turn On During Same Call Initiated by Region: For failure by the Customer to arrange with the Region for meter installation, replacement, repair or inspection or meter reading (off or on, each) For Water Shut Off Notification prior to shut off action being taken For Water Shut Off for collection action, (water not necessarily shut off) for non-payment of Water/Sewer bill, or any Regional invoice, or for violation of any provision of the Water System/Sewer System By-laws (water not necessarily shut off) Turn Water On	F1	E1		73.00 73.00 74.00 110.00 110.00 110.00 73.00 37.00 for both 94.00 for both 73.00 for both	77.00 77.00 78.00 110.00 110.00 110.00 77.00 39.00 for both 94.00 for both 77.00 for both
16) Standby charge while water service is shut off but not disconnected	F2		Standard Service Charge		Standard Service Charge

Schedule 4 - Recommended 2017 Miscellaneous Charges Item Number & Description	By-Law Schedule Reference		Existing 2016 Charges		Recommended 2017 Charges
	Water By-law #89-2003	Sewer By-law #90-2003	Water \$	Sewer \$	Note: Changes are in Bold \$
17) <u>Testing of Water Meter</u> Initiated by Customer: - Deposit Fee where the meter is found to measure the flow of water within or below AWWA Specifications - Up to a maximum size of 25mm - Over 25mm Fee if meter is found to measure the flow of water above AWWA specifications	F3		209.00 209.00 Actual Cost No Charge		209.00 209.00 Actual Cost No Charge
18) Unmetered water used for construction (building purposes) per service	F4		87.00		110.00
19) Drawing Regional water from hydrant for purposes other than fire protection i) Area Municipalities - /cubic metre - /1000 gallons ii) Others - /cubic metre - /1000 gallons - Deposit - Meter Installation/removal - Minimum Charge - Administration Fee - Meter Assembly Rental - Daily - Minimum - Service Charge (monthly)	F5		3.38 15.36 3.38 15.36 460.40 - 460.40 121.40 - - -		3.38 15.36 3.38 15.36 1,000.00 104.00 - 121.40 3.50 25.00 25.00
20) Repair or replacement of frozen, damaged or missing water meter - Up to a maximum size of 19mm (3/4") - Over 19mm (3/4")	F6		205.00 Actual Cost		205.00 Actual Cost
21) Thawing of service pipes	F7		No Charge		No Charge
22) Thawing of private hydrants or unmetered Fire Lines	F8		Actual Cost		Actual Cost
23) Cleaning sanitary sewer services		E3		No Charge	No Charge
24) Repair to or renewal of sanitary building sewers		E4		No Charge	No Charge
25) Supplying Statement of Account	F9	E5	32.00 for both		33.00 for both
26) Charge for Regional Solicitor providing information	F10	E6	84.00 for both		88.00 for both
27) Processing of Dishonoured Payments	F11	E7	46.00 for both		46.00 for both
28) Account Payment Transfer Fee	F12	E8	10.00 for both		10.00 for both
29) Change of Occupancy	F13	E9	38.00 for both		40.00 for both
30) Charge for Late Payment of Water/Sewer Surcharge Rates	F14	E10	2%		2%
31) Lien Administration Fee	F15	E11	68.00 for both		71.00 for both
32) Installation and removal of anti-tampering devices on fire hydrants & curb stops	F16		126.00		132.00

Schedule 4 - Recommended 2017 Miscellaneous Charges Item Number & Description	By-Law Schedule Reference		Existing 2016 Charges		Recommended 2017 Charges
	Water By-law #89- 2003	Sewer By-law #90- 2003	Water \$	Sewer \$	Note: Changes are in Bold \$
33) Water from Water Supply Plants, Water Pollution Control Plants, Works Depots & Bulk Filling Stations - /cubic metre - /1000 gallons - Minimum Volume Charge \$/per month - Occasional Users – Flat Rate - Account Administration Fee \$/year - Key deposit - Refundable on return of key - Swipe card	F17		2.84 12.91 49.60 35.90 121.00 206.00 171.00 -		2.84 12.91 49.60 35.90 121.00 206.00 171.00 35.00
34) Fire Flow tests: - Full test (May 1 – Oct 31) - Full test (Nov 1 – Apr 30) - Opening Hydrants (May 1 – Oct 31) - Opening Hydrant (Nov 1 – Apr 30)	F18		458.00 797.00 314.00 640.00		458.00 797.00 314.00 640.00
35) Sewage Surcharge and Compliance Agreements		E12		1,885.00	1,885.00
36) Disposal of Septic Tank and Holding Tank Waste and the disposal of Water Pollution Control Plant Sludge: a) Hauled Domestic Waste - /cubic metre - /1000 gallons b) Sludge from WPCP within the Regions of York and Durham and trucked to the incineration facilities at Duffin Creek WPCP - /cubic metre - /1000 gallons c) Annual charge for registration of Haulers (up to 10 vehicles) - Additional stickers if more than 10 vehicles, or replacement stickers – per sticker d) ICI Sector areas (discharges up to 50,000 gallons) e) ICI Sector areas (discharges of 50,001 to 100,000 gallons)		E2		19.56 88.93 16.19 73.59 175.00 10.20 522.75 1,024.59	19.56 88.93 16.19 73.59 175.00 10.20 522.75 1,024.59
37) Copies of By-laws Water System, Sewer System and Sewer Use (+ Applicable taxes)	F19	E13	18.20/copy		19.10/copy
38) Sewer TV Inspection Reports and Videos per report or video (+ Applicable taxes)		E14		17.80	20.43
39) Sewer Use By-law Agreement extra strength waste (\$/k.g.)				0.53	0.53
40) Sewer Appeal Application per request		E15		600.00	650.00

Schedule 5 Recommended 2017 Fee Schedule for Laboratory Services at the Regional Environmental Laboratory Located at the Duffin Creek WPCP

Description	2016 Rate (before appl. Taxes)		2017 Rate (before appl. Taxes)	
	\$	\$	\$	\$
Laboratory Fees Page 1 of 9				
ONTARIO DRINKING WATER REGULATION 170/03 PACKAGES				
DESCRIPTION				
Microbiological				
Presence/Absence Test (P/A for TC, EC)	\$14.30		\$14.30	
Treated Water (P/A, HPC or BKD)	\$26.50		\$26.50	
Well Water/Raw/Reg.319 (TC, EC)	\$27.50		\$27.50	
Well Water/Treated/Distribution (TC, EC, HPC)	\$37.70		\$37.70	
Resample Tests (e.g. MFHPC, MFTC)	\$13.30		\$13.30	
Resample Test (E.coli)	\$14.30		\$14.30	
Inorganic Chemical				
All Parameters required under Schedule 23 (As, B, Ba, Cd, Cr, Hg, Sb, Se, U)	\$80.60		\$80.60	
All Parameters required under Schedule 23 plus additional metals (Al, As, B, Ba, Cd, Co, Cr, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Sb, Se, U, Zn)	\$80.60		\$80.60	
Inorganic Ions required under O.Regulation 170/03 (F, NO2, NO3, Na)	\$79.60		\$79.60	
Inorganic Ions required under O.Regulation 170/03 plus additional Ions (Hardness*, Ca, Mg, Na, K, Ammonia, F, Cl, Br, NO2, NO3, PO4, SO4)	\$79.60		\$79.60	
(Nitrite, Nitrate)	\$52.00		\$52.00	
(Sodium)	\$34.70		\$34.70	
(Fluoride)	\$34.70		\$34.70	
(Lead testing as required under O.Regulation 170)	\$35.70		\$35.70	
(Lead testing as required under O.Regulation 243) - For Standing & Flushed	\$102.00		\$102.00	
Organic Chemical				
THMs (Trihalomethanes)	\$102.00		\$150.00	
bromodichloromethane		bromoform		
dibromochloromethane		chloroform		
THM (Total)				
All Parameters required under Schedule 24 (Please see Parameters listed in O.Regulation 170/03)	\$1,087.30		\$1,087.30	
All Parameters required under Schedule 24 plus additional Organic Parameters (Includes all Parameters described under the following test CODES listed in this book - VOC, OC, TRIAZ, OP, PHENAC, CHLORPHEN, CARBUREA, GLYPH, DIPARA, PCB)	\$1,087.30		\$1,087.30	
Combined Packages				
York Region Drinking Water Package A (Includes DW2M (less TURB), Hg, B, Ba, U, VOC, OC, TRIAZ, OP, PHENAC, CHLORPHEN, CARBUREA, GLYPH, DIPARA, PCB)	\$1,285.20		\$1,285.20	
*Calculation included (no charge).				

THE REGIONAL MUNICIPALITY OF DURHAM					
2017 FEES AND CHARGES (DRAFT)					
WORKS DEPARTMENT - ENVIRONMENTAL LABORATORY					
Description	2016 Rate (before appl. Taxes)		2017 Rate (before appl. Taxes)		
	\$	\$	\$	\$	
Laboratory Fees Page 2 of 9					
<u>MICROBIOLOGICAL CODES</u>					
<u>DESCRIPTION</u>					
O.Regulation 170/03					
Presence/Absence Test (P/A for TC, EC)	\$14.30		\$14.30		
Treated Water (P/A, HPC or BKD)	\$26.50		\$26.50		
Well Water/Raw/Reg.319 (TC, EC)	\$27.50		\$27.50		
Well Water/Treated/Distribution (TC, EC, HPC)	\$37.70		\$37.70		
Raw Water Intake, Municipal (TC, EC, BKD)	\$32.60		\$32.60		
Treated/Distribution Water (TC, EC, BKD, HPC)	\$42.80		\$42.80		
Resample Tests (e.g. MFHPC, MFTC)	\$13.30		\$13.30		
Resample Test (E.coli)	\$14.30		\$14.30		
New Mains					
New Water Mains (TC, EC, BKD, HPC)	\$42.80		\$42.80		
New Water Mains (TC, EC, BKD, HPC)+Thiosulphate	\$53.00		\$70.00		
Waste Water					
E.coli (Final Effluent)	\$16.30		\$16.30		
E.coli (Sludge / Cake)	\$30.60		\$30.60		
Final Effluent (TC, EC)	\$30.60		\$30.60		
Final Effluent (TC, EC, FS)	\$40.80		\$40.80		
Microscopic Examination	\$96.90		\$100.00		
Recreational Water					
E.coli (Lake/Beach/Creek/Pond/River)	\$14.30		\$14.30		
Lakes / Bathing beaches (TC, EC, FS)	\$37.70		\$37.70		
Any Single Membrane Filtration Test (eg. FC - MFFC, AE - MFAE, PS, SA etc.)	\$25.50		\$25.50		
Raw and Treated Water					
Algae Enumeration and Identification	\$75.50		\$100.00		
Algae by Microscopic Particulate Analysis	\$500.00		\$500.00		
Microcystin	\$153.00	MOE Reg O.160/03	\$153.00		
F Specific Coliphages	\$200.00		\$200.00		
Mycology (Fungi)					
Fungal Enumeration	\$21.40		\$21.40		
Fungal Identification (Consultation Required)	\$107.10		\$107.10		
Air Quality (Microbial - Bacteria, Yeasts & Molds)	\$54.10		\$54.10		
Enumeration of Bacteria, Yeast and Molds by RODAC plates (BHI & SAB/MEA)	\$50.00		\$50.00		
Protozoa Testing					
Cryptosporidium and Giardia (MBCG)	-		\$800.00		New
Cryptosporidium, Giardia and Microscopic Particulate Analysis (MBCGMPA)	-		\$1,100.00		New
Sterility (Spore) Testing					
Bacillus subtilis (DRY)	\$25.50		\$25.50		
Bacillus stearothermophilus (STEAM)	\$25.50		\$25.50		
Other Bacteriological Groups					
Private Wells (TC, EC)(Signed Report faxed next day)	\$76.50		\$76.50		
Iron Bacteria - Presence/Absence	\$54.10		\$54.10		
Sulphur Bacteria - Presence/Absence	\$54.10		\$54.10		
Iron & Sulphur Bacteria - Presence/Absence	\$85.70		\$85.70		
Enumeration for (TC, EC, FC, HPC, BKD, PS, AE or FS) per parameter	\$51.00		\$51.00		

THE REGIONAL MUNICIPALITY OF DURHAM					
2017 FEES AND CHARGES (DRAFT)					
WORKS DEPARTMENT - ENVIRONMENTAL LABORATORY					
Description	2016 Rate (before appl. Taxes)		2017 Rate (before appl. Taxes)		
	\$	\$	\$	\$	
Laboratory Fees Page 3 of 9					
GENERAL INORGANIC CODES					
	Water	S/S/S	Water	S/S/S	
DESCRIPTION					
pH, Conductivity, Alkalinity	\$27.50	\$32.60	\$27.50	\$32.60	
Alkalinity	\$16.30	\$21.40	\$16.30	\$21.40	
Conductivity	\$11.20	\$16.30	\$11.20	\$16.30	
pH	\$11.20	\$16.30	\$11.20	\$16.30	
Fluoride by Ion Selective Electrode	\$21.40	\$27.50	\$21.40	\$27.50	
Total Residual Chlorine	\$11.20	\$19.40	\$11.20	\$19.40	
Free Residual Chlorine	\$11.20	\$19.40	\$11.20	\$19.40	
Colour	\$16.30	\$19.40	\$16.30	\$19.40	
Turbidity	\$16.30	\$19.40	\$16.30	\$19.40	
Biochemical Oxygen Demand (BOD5)	\$35.70	\$42.80	\$35.70	\$42.80	
Carbonaceous Biochemical Oxygen Demand (cBOD5)	\$35.70	\$42.80	\$35.70	\$42.80	
Chemical Oxygen Demand (COD)	\$31.60	\$37.70	\$31.60	\$37.70	
Dissolved Organic Carbon (DOC)	\$29.60	\$37.70	\$29.60	\$37.70	
Cyanide (Total)	\$40.80	\$47.90	\$40.80	\$47.90	
Cyanide (Free)	\$40.80	\$47.90	\$40.80	\$47.90	
Phenol	\$37.70	\$45.90	\$37.70	\$45.90	
Sulphide (H2S)	\$37.70	\$45.90	\$37.70	\$45.90	
Silicate (SiO3)	\$27.50	\$32.60	\$27.50	\$32.60	
Dissolved Solids (DS)	\$18.40	\$21.40	\$18.40	\$21.40	
Dissolved Solids, Ashed Dissolved Solids	\$26.50	\$29.60	\$26.50	\$29.60	
Volatile Dissolved Solids*					
Suspended Solids (SS)	\$15.30	\$17.30	\$15.30	\$17.30	
Suspended Solids, Ashed Suspended Solids, Volatile Suspended Solids*	\$21.40	\$24.50	\$21.40	\$24.50	
Total Solids (TS)	\$13.30	\$15.30	\$13.30	\$15.30	
Total Solids, Ashed Total Solids, Volatile Total Solids*	\$19.40	\$21.40	\$19.40	\$21.40	
Dissolved Solids, Suspended Solids, Total Solids	\$35.70	\$40.80	\$35.70	\$40.80	
Total Oil & Grease	\$53.00	\$63.20	\$53.00	\$63.20	
Total / Mineral / Animal & Vegetable* Oil & Grease	\$80.60	\$96.90	\$80.60	\$96.90	
Volatile Acids	\$30.60	\$30.60	\$30.60	\$30.60	
Moisture	-	\$19.40	-	\$19.40	
S/S/S = Sewage, Sludge and Soil					
*Calculation included (no charge).					

THE REGIONAL MUNICIPALITY OF DURHAM					
2017 FEES AND CHARGES (DRAFT)					
WORKS DEPARTMENT - ENVIRONMENTAL LABORATORY					
Description	2016 Rate (before appl. Taxes)		2017 Rate (before appl. Taxes)		
	\$	\$	\$	\$	
Laboratory Fees Page 4 of 9					
GENERAL INORGANIC CODES					
	<u>Water</u>	<u>S/S/S</u>	<u>Water</u>	<u>S/S/S</u>	
DESCRIPTION					
Ion Chromatography					
Hardness*, Ca, Mg, Na, K, Ammonia, F, Cl, Br, NO ₂ , NO ₃ , PO ₄ , SO ₄	\$79.60	\$95.90	\$79.60	\$95.90	
F, Cl, Br, NO ₂ , NO ₃ , PO ₄ , SO ₄	\$52.00	\$62.20	\$52.00	\$62.20	
Hardness*, Ca, Mg, Na, K, Ammonia	\$52.00	\$62.20	\$52.00	\$62.20	
Any One of the Above Single Elements by IC	\$34.70	\$40.80	\$34.70	\$40.80	
Nutrients by Segmented Flow Analyzer					
NH ₃ +NH ₄ , PO ₄ , NO ₂ , NO ₂ +NO ₃ , TKN, TP	\$98.90	\$118.30	\$98.90	\$118.30	
NH ₃ +NH ₄ , PO ₄ , NO ₂ , NO ₂ +NO ₃	\$59.20	\$70.40	\$59.20	\$70.40	
TKN, TP	\$59.20	\$70.40	\$59.20	\$70.40	
Any One of the Above Single Nutrients by SFA	\$38.80	\$46.90	\$38.80	\$46.90	
Metals					
Mercury (Hg) by Cold Vapour AA or AF	\$35.70	\$42.80	\$35.70	\$42.80	
Acid Soluble Metals by ICP (Al, Fe, Mn, Pb, Zn)	\$40.80	-	\$40.80	-	
Cation Scan by ICP (B, Ba, Be, Ca, K, Li, Mg, Na, SiO ₃ , Sr, U)	\$40.80	-	\$40.80	-	
Heavy Metals Scan by ICP (Water) (Al, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Se, Sb, Zn)	\$54.10	\$64.30	\$54.10	\$64.30	
Heavy Metals Scan by ICP (Sewage/Sludge/Soil) (As, Cd, Co, Cr, Cu, Mo, Ni, Pb, Se, Zn)	-	\$64.30	-	\$64.30	
Regulation 170 - Heavy Metals Scan by ICP (Al, As, B, Ba, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb, Se, U, Zn)	\$76.50	-	\$76.50	-	
Any One of the Above Single Metals by ICP	\$35.70	\$42.80	\$35.70	\$42.80	
(Lead testing as required under O.Regulation 170)	\$35.70	-	\$35.70	-	
(Lead testing as required under O.Regulation 243)	\$51.00	-	\$75.00	-	
Other elements such as (Ag, Ti, V, Tl, etc.) are available as single element requests.					
S/S/S = Sewage, Sludge and Soil					
* = Calculation Included (no charge)					

THE REGIONAL MUNICIPALITY OF DURHAM				
2017 FEES AND CHARGES (DRAFT)				
WORKS DEPARTMENT - ENVIRONMENTAL LABORATORY				
Description	2016 Rate (before appl. Taxes)		2017 Rate (before appl. Taxes)	
	\$	\$	\$	\$
Laboratory Fees Page 5 of 9				
<u>INORGANIC MONITORING PACKAGES</u>				
<u>DESCRIPTION</u>				
<u>Drinking Water</u>				
Drinking Water Package #1				
(pH, conductivity, alkalinity, chloride, fluoride, bromide, nitrite, nitrate, phosphate, sulphate, calcium, magnesium, sodium, potassium, ammonia, hardness*, ionic balance*, total anions*, total cations*, calculated dissolved solids*, calculated conductivity*, langelier index*)				
	\$96.90		\$96.90	
Drinking Water Package #2				
(colour, turbidity, Al, Fe, Mn, Pb, Zn)				
(pH, conductivity, alkalinity, chloride, fluoride, bromide, nitrite, nitrate, phosphate, sulphate, calcium, magnesium, sodium, potassium, ammonia, hardness*, ionic balance*, total anions*, total cations*, calculated dissolved solids*, calculated conductivity*, langelier index*)				
	\$149.90		\$149.90	
Drinking Water Package #2 with expanded metals				
(colour, turbidity, Al, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb, Se, Zn)				
(pH, conductivity, alkalinity, chloride, fluoride, bromide, nitrite, nitrate, phosphate, sulphate, calcium, magnesium, sodium, potassium, ammonia, hardness*, ionic balance*, total anions*, total cations*, calculated dissolved solids*, calculated conductivity*, langelier index*)				
	\$174.40		\$174.40	
<u>Landfill Monitoring</u>				
Surface Water				
(BOD, COD, colour, phenol, total solids, suspended solids, dissolved solids*, pH, conductivity, alkalinity, fluoride, chloride, bromide, nitrite, nitrate, sulphate, phosphate, calcium, magnesium, sodium, potassium, ammonia, hardness*, total cations*, total anions*, ionic balance*, calculated dissolved solids*, calculated conductivity*, langelier index*, dissolved organic carbon, total kjeldahl nitrogen, total phosphorus, Al, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb, Se, Zn)				
	\$370.30		\$370.30	
(Filtration of Raw Landfill samples)				
	\$35.70		\$35.70	
*Calculation included (no charge).				

THE REGIONAL MUNICIPALITY OF DURHAM					
2017 FEES AND CHARGES (DRAFT)					
WORKS DEPARTMENT - ENVIRONMENTAL LABORATORY					
Description	2016 Rate (before appl. Taxes)		2017 Rate (before appl. Taxes)		
	\$	\$	\$	\$	
Laboratory Fees Page 6 of 9					
<u>INORGANIC MONITORING PACKAGES</u>					
<u>DESCRIPTION</u>					
<u>Sewer Use By-law</u>		\$415.10		\$415.10	
Complete Inorganic Package					
sulphate, phenol, cyanide, Total/Mineral/Animal & Vegetable Oil & Grease					
Hg, Ag, Al, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, Zn					
<u>Sewage and Industrial Waste</u>					
Monitoring Package #1		\$42.80		\$42.80	
(BOD5, suspended solids)					
Monitoring Package #2		\$100.00		\$100.00	
(BOD5, susp. solids, total kjeldahl nitrogen, total phosphorus)					
Monitoring Package #2 plus Metals		\$161.20		\$161.20	
(BOD5, susp. solids, total kjeldahl nitrogen, total phosphorus					
Al, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb, Se, Zn)					
Monitoring Package #3		\$149.90		\$149.90	
(BOD5, susp. solids, total kjeldahl nitrogen, total phosphorus					
ammonia+ammonium, nitrite, nitrite+nitrate, diss. phosphate)					
Monitoring Package #3 plus Metals		\$211.10		\$211.10	
(BOD5, susp. solids, total kjeldahl nitrogen, total phosphorus					
ammonia+ammonium, nitrite, nitrite+nitrate, diss. phosphate					
Al, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb, Se, Zn)					
Monitoring Package #4 plus Metals		\$262.10		\$262.10	
(BOD5, CBOD5, susp. solids, total kjeldahl nitrogen, total phosphorus					
ammonia+ammonium, nitrite, nitrite+nitrate, diss. phosphate, pH					
Al, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb, Se, Zn)					
<u>Sludge</u>					
Sludge Monitoring Package #1		\$116.30		\$116.30	
(total solids, total kjeldahl nitrogen, total phosphorus,					
ammonia+ammonium, nitrite, nitrite+nitrate, diss. phosphate)					
Sludge Monitoring Package #1 plus Metals		\$177.50		\$177.50	
(total solids, total kjeldahl nitrogen, total phosphorus,					
ammonia+ammonium, nitrite, nitrite+nitrate, diss. phosphate					
Hg, As, Cd, Co, Cr, Cu, Mo, Ni, Pb, Se, Zn)					
Sludge Monitoring Package #2 (Agrisludge)		\$204.00		\$204.00	
(total solids, ashed total solids, volatile total solids*,					
total kjeldahl nitrogen, total phosphorus, ammonia+ammonium					
nitrite + nitrate, Hg, As, Cd, Co, Cr, Cu, K, Mo, Ni, Pb, Se, Zn)					
*Calculation included (no charge).					

THE REGIONAL MUNICIPALITY OF DURHAM					
2017 FEES AND CHARGES (DRAFT)					
WORKS DEPARTMENT - ENVIRONMENTAL LABORATORY					
Description		2016 Rate		2017 Rate	
		(before appl. Taxes)		(before appl. Taxes)	
		\$	\$	\$	\$
Laboratory Fees Page 7 of 9					
ORGANIC MONITORING PACKAGES					
DESCRIPTION					
Drinking / Surface / Ground Water and Wastewater					
THMs (Trihalomethanes)					
bromodichloromethane	bromoform	\$102.00		\$102.00	
dibromochloromethane	chloroform				
THM (Total)					
BTEX by Purge & Trap GC/MS					
benzene	ethylbenzene	\$80.60		\$80.60	
m,p-xylene	o-xylene				
toluene					
Taste & Odour					
geosmin	2-methylisoborneol (MIB)	\$229.50		\$250.00	
2-isobutyl-3-methoxypyrazine	2-isopropyl-3-methoxypyrazine				
2,3,6-trichloroanisole	2,4,6-trichloroanisole				
Haloacetic Acids (Disinfection By-Products)					
bromochloroacetic acid	dibromoacetic acid	\$198.90		\$198.90	
dichloroacetic acid	monobromoacetic acid				
monochloroacetic acid	trichloroacetic acid				
Volatile Organic Compounds					
benzene	cis-1,2-dichloroethylene	\$128.50		\$128.50	
bromodichloromethane	trans-1,2-dichloroethylene				
bromoform	dichloromethane				
bromomethane	1,2-dichloropropane				
carbon tetrachloride	cis-1,3-dichloropropylene				
chlorobenzene	trans-1,3-dichloropropylene				
chlorodibromomethane	ethylbenzene				
chloroethane	styrene				
chloroform	1,1,2,2-tetrachloroethane				
chloromethane	toluene				
tetrachloroethylene (perchloroethylene)	1,1,1-trichloroethane				
1,2-dibromoethane(ethylene dibromide)	1,1,2-trichloroethane				
1,2-dichlorobenzene	trichloroethylene				
1,3-dichlorobenzene	trichlorofluoromethane				
1,4-dichlorobenzene	vinyl chloride				
1,1-dichloroethane	o-xylene				
1,2-dichloroethane	m,p-xylene				
1,1-dichloroethylene	THM (Total)				
methyl tert-butyl ether (MTBE)	xylene (Total)				
methyl ethyl ketone (MEK)	2-hexanone				
methyl isobutyl ketone (MIBK)	acetone				
1,1,1,2-tetrachloroethane	1,2,4-trichlorobenzene				
Pesticide/Herbicide Analysis					
Organochlorine Pesticides					
aldrin	endosulphan I	\$123.40		\$123.40	
a-BHC	endosulphan II				
b-BHC	endosulphan sulphate				
g-BHC (Lindane)	endrin				
a-chlordane	heptachlor				
g-chlordane	heptachlor epoxide				
p,p'-DDD	methoxychlor				
p,p'-DDE	mirex				
p,p'-DDT	oxychlordane				
o,p'-DDT	trifluralin				
dieldrin	toxaphene				

THE REGIONAL MUNICIPALITY OF DURHAM					
2017 FEES AND CHARGES (DRAFT)					
WORKS DEPARTMENT - ENVIRONMENTAL LABORATORY					
Description		2016 Rate		2017 Rate	
		(before appl. Taxes)		(before appl. Taxes)	
		\$	\$	\$	\$
Laboratory Fees Page 8 of 9					
ORGANIC MONITORING PACKAGES					
DESCRIPTION					
<u>Pesticide/Herbicide Analysis</u>					
Triazine Herbicides					
alachlor (Lasso)	metolachlor	\$107.10		\$107.10	
ametryn	metribuzin (Sencor)				
atraton	prometon				
atrazine	prometryn				
cyanazine (Bladex)	propazine				
desethyl atrazine	simazine				
desethyl simazine					
Organophosphorus Pesticides					
chlorpyrifos (Dursban)	malathion	\$107.10		\$107.10	
chlorpyrifos-methyl (Reldan)	methyl parathion				
diazinon	mevinphos (Phosdrin)				
dichlorvos	parathion				
dimethoate	phorate (Thimet)				
ethion	temephos (Abate)				
fenchlorphos (Ronnell)	terbufos				
guthion (Azinphos-methyl)					
Phenoxy Acid Herbicides					
2,4-dichlorophenoxyacetic acid (2,4-D)		\$161.20		\$161.20	
2,4-dichlorophenoxybutyric acid (2,4-DB)					
2,4-dichlorophenoxypropionic acid (2,4-DP, Dichlorprop)					
2,4,5-trichlorophenoxyacetic acid (2,4,5-T)					
bromoxynil	dinoseb				
dicamba	picloram				
diclofop-methyl	silvex (2,4,5-TP)				
Chlorophenols					
2,4-dichlorophenol	2,3,4,6-tetrachlorophenol	\$161.20		\$161.20	
2,4,6-trichlorophenol	2,3,4,5-tetrachlorophenol				
2,3,4-trichlorophenol	2,3,5,6-tetrachlorophenol				
2,4,5-trichlorophenol	pentachlorophenol				
Carbamate & Phenyl Urea Pesticides/Herbicides					
Aldicarb	Bendiocarb	\$239.70		\$239.70	
Carbaryl	Carbofuran				
Diuron	Triallate				
Benzo(a)pyrene					
Glyphosate	AMPA	\$198.90		\$198.90	
Diquat	Paraquat	\$198.90		\$198.90	
PCB Analysis					
Polychlorinated Biphenyls		\$80.60		\$80.60	
PAHs (Polynuclear Aromatic Hydrocarbons) by GC/MSD					
Acenaphthene	Chrysene	\$229.50		\$229.50	
Acenaphthylene	Dibenz(a,h)anthracene				
Anthracene	Fluoranthene				
Benzo(a)anthracene	Fluorene				
Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene				
Benzo(b)fluoranthene	1-Methylnaphthalene				
Benzo(g,h,i)perylene	2-Methylnaphthalene				
Benzo(k)fluoranthene	Naphthalene				
1-Chloronaphthalene	Phenanthrene				
1-Chloronaphthalene	Pyrene				
Open Characterization (Semi-quantitative)					
Volatiles		\$209.10		\$209.10	
(Scans for Volatile Organic Compounds)					
Extractables		\$246.80		\$246.80	
(Scans for Extractable Organic Compounds)					

THE REGIONAL MUNICIPALITY OF DURHAM			
2017 FEES AND CHARGES (DRAFT)			
WORKS DEPARTMENT - ENVIRONMENTAL LABORATORY			
Laboratory Fees Page 9 of 9			
ORGANIC MONITORING PACKAGES			
Industrial Sewer Use By-law Acid/Base/Neutral Compounds		\$214.20	\$214.20
di-n-butylphthalate	bis(2-ethylhexyl)phthalate		
Polychlorinated Biphenyls		\$80.60	\$80.60
Industrial Sewer Use By-law Volatile Organic Compounds		\$134.60	\$134.60
1,1,2,2,-tetrachloroethane	m/p-xylene		
1,2-dichlorobenzene	o-xylene		
1,4-dichlorobenzene	styrene		
benzene	tetrachloroethylene		
chloroform	toluene		
cis-1,2-dichloroethylene	trans-1,3-dichloropropylene		
dichloromethane	trichloroethylene		
ethylbenzene	xylene (Total)		
methyl ethyl ketone (MEK)			
Industrial Sewer Use By-law Nonylphenols & Ethoxylates (Subcontracted)		\$428.40	Subcontractor's Rate
nonylphenol	nonylphenol ethoxylates		
Durham/York/Peel Sewer Use By-law Organic Package		\$777.20	\$777.20
1,1,2,2,-tetrachloroethane	m/p-xylene		
1,2-dichlorobenzene	o-xylene		
1,4-dichlorobenzene	styrene		
benzene	tetrachloroethylene		
chloroform	toluene		
cis-1,2-dichloroethylene	trans-1,3-dichloropropylene		
dichloromethane	trichloroethylene		
ethylbenzene	xylene (Total)		
methyl ethyl ketone (MEK)			
di-n-butyl phthalate	bis (2-ethylhexyl) phthalate		
PCB (Total)			
nonylphenol	nonylphenol ethoxylates		
Total Petroleum Hydrocarbons (TPH) in Water (Subcontracted)		\$204.00	Subcontractor's Rate
This CCME method includes:			
a). BTEX-Purgeables by P&T GC/MS or HS GC/FID - gasoline range			
b). Extractables by GC/FID - diesel range			
c). Total Oil & Grease by Gravimetric - heavy oil range			
Legal Sample Fees and Legal Storage Fees			
Samples submitted under legal chain of custody	per sample	\$255.00	\$255.00
(To maintain an unbroken chain of custody for samples that may be used for litigation)			
Extended storage for legal samples (longer than 30 days)	per container per month	\$3.10	\$3.10
(Samples will be stored free of charge for 30 days from the date of final report)			
Court testimony by Regional Environmental Laboratory staff	per hour (including travel and wait time)	To be determined case-by-case	To be determined case-by-case
Mileage for appearance	per kilometre (actual)	\$0.55	\$0.55