



# JOINT BOARD OF MANAGEMENT

Wednesday, February 21, 2018

9:00 AM

Kingsville Community Room  
Kingsville Arena  
1741 Jasperson Road, Kingsville

## AGENDA

**A. Call to Order:**

**B. Election of Chair for the UWSS Joint Board of Management**

UW/01/18 - 2018 Election of the UWSS Joint Board of Management Chair and Vice Chair, dated January 12, 2018  
Pages 3 - 6

**C. Election of Vice-Chair for the UWSS Joint Board of Management**

**D. Disclosures of Pecuniary Interest:**

**E. Approval of Minutes:**

Minutes of the meeting of the Union Water Supply System Joint Board of Management Meeting held Wednesday, December 20, 2017  
Pages 7 - 11

**F. Business Arising Out of the Minutes**

**G. Items for Consideration:**

1. UW/02/18 dated February 16, 2018 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works to February 16, 2018  
Pages 12 - 14
2. UW/03/18 dated February 15, 2018 re: 2017 Annual Report under the Safe Drinking Water Act and Ontario Regulation 170/03  
Page 15 - 23
3. UW/04/18 dated February 15, 2018 re: 2017 Summary Report for Municipalities under Regulation 170/03 made under the Safe Drinking Water Act.  
Pages 24 - 32
4. UW/05/18 dated February 16, 2018 re: Payments from December 16, 2016 to February 16, 2018  
Pages 33 - 40

**H. Special Closed Meeting of UWSS Joint Board of Management:****Recommendation:**

That the UWSS Joint Board of Management move into Special Closed meeting, pursuant to the Municipal Act Section 239 for the following reasons:

**Matters for Consideration:** (submitted under separate cover)

1. Confidential Report C-UW01-18 Legal Opinion and Financial Business Case for Proposed UWSS Restructuring dated February 15, 2018. Review and discussion of report to be considered in closed session pursuant to Subsection 239(2)(f) advice that is subject to solicitor-client privilege, including communications necessary for that purpose.
2. Confidential Report C-UW02-18 Legal Opinion Regarding Water Rates dated February 15, 2018. Review and discussion of the report is considered in closed session pursuant to Subsection 239(2)(f) advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

**I. Disclosures of Pecuniary Interest and General Nature Thereof**

(Closed meeting)

**J. Adjournment of Special Closed Meeting****K. Resumption of Regular UWSS Joint Board of Management Meeting****L. Report on Closed Session:****M. New Business:****N. Adjournment:****O. Date of Next Meeting: Wednesday, March 21, 2018, 9:00 am, Kingsville Community Room, 1741 Jasperson Road, Kingsville Arena**

/kmj

TO: CHAIR AND MEMBERS OF THE UNION WATER  
SUPPLY SYSTEM JOINT BOARD OF MANAGEMENT

FROM: RODNEY BOUCHARD, UNION WATER MANAGER

DATE: JANUARY 12, 2018

RE: PROCEDURE FOR THE ELECTION OF THE UWSS CHAIR AND VICE  
CHAIR



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**AIM:**

To inform the Board of the procedure for the election of a Chair and Vice-Chair of the Board for a term ending on December 31, 2018.

**BACKGROUND**

The Transfer Order which established the Joint Board of Management of the Union Water Supply System sets out certain rules for the Board. The following are among the items specified in the Transfer Order regarding the Chair and Vice-Chair:

- That the Board members are appointed by the municipalities for a term of one year.
- That there is to be a Chair and Vice-Chair elected from amongst the members of the Board.
- That the Chair and Vice-Chair must be from different municipalities.
- That the Chair and Vice-Chair are elected for a term of one year.

**DISCUSSION:**Functions of a Chair and Vice-Chair

The Chair and Vice-Chair are positions that are prescribed in the UWSS Transfer Order. The Chair is responsible for the following duties under the Transfer Order:

1. Chairing of meetings of the Joint Board of Management.
2. Calling meetings of the Joint Board of Management.
3. Executing agreements and conveyances entered into by the Joint Board of Management. The Chair co-signs with another member of the Board.

January 12, 2018 - UW/01/18

Re: Election for the 2018 Chair and Vice Chair for the UWSS

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The Vice-Chair is designated under the Transfer Order to act as Chair in the absence of the Chair.

In addition to the functions that are set out in the Transfer Order, the Chair and Vice-Chair undertake the following tasks which have been determined by the Board over the 10 years of its existence.

1. The Chair and Vice-Chair have signing authority on the UWSS bank accounts along with the UWSS Manager and the Leamington Director of Finance. Account transfers require two signatures, one of the Chair or Vice-Chair and one of the Manager or the Finance Director.
2. The Chair and Vice-Chair meet once a month with the Manager to review the proposed agenda for the next Board meeting.
3. The Chair and Vice-Chair conduct an annual performance appraisal of the Manager.

Under the Transfer Order the Chair and Vice-Chair are elected for a one year term and must be from different municipalities. These requirements are intended to ensure that the Board acts in the overall system's interest and in the interest of all of the municipal owners. In some of the other Joint Boards of Management set up under the same legislation, the position of Chair is required to rotate annually or biannually among the municipal owners.

This memorandum is intended to allow the Board members to prepare for the election. Any questions regarding the procedure should be given to the Manager before the meeting if possible.

#### Election Procedure

The established procedure for the election of the Chair and Vice-Chair of the Joint Board of Management should be as follows:

The Manager will chair the meeting until the election of the new Chair.

The Manager will call the meeting to order.

The first order of business is the election of the Chair.

The Transfer Order under section 1 (g) says that the Chair and Vice-Chair may not be from the same municipality. This means that the election of the Chair must be completed before the Board can determine which members are eligible to be elected as Vice-Chair.

The Manager will ask for nominations from the Board for the position of Chair. Nominees must have a proposer and a seconder (neither of which can be the nominee) and the nominee will be asked if they are willing to accept the nomination. The list of candidates will be made up of those nominees who accept their nomination.

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If there is only one successful nomination, that candidate will be acclaimed as Chair.

If there are two or more nominations, there will be an election. The Manager will state the names of the nominees in alphabetical order by surname. After each name is announced there will be a show of hands by those wishing to vote for that candidate. Board members shall only vote for one candidate. Candidates can vote for themselves.

The Administrative Assistant will record the number of votes for each candidate. The nominee with the most votes will be declared to be the Chair for the year to December 31, 2015.

If there is a tie for the most votes cast, the name of each nominee who is tied will be written on a slip of paper by the Manager and the slips will be placed in a hat or box. The Administrative Assistant will draw one slip and the name on that slip will be declared as the new Chair.

The Manager will ask for a motion confirming the appointment of the successful candidate as Chair.

The new Chair will then take charge of the meeting.

The Chair will then proceed with the election of the Vice-Chair. If the Chair is from a municipality with more than one member on the Board, no Board member from that municipality is eligible to serve as Vice-Chair.

The Chair will ask for nominations from the Board for the post of Vice-Chair. Again, nominees must have a proposer and a seconder and the nominee will be asked if they are willing to accept the nomination. The list of candidates will be made up of those nominees who accept their nomination.

If there is only one nomination, that candidate will be acclaimed as Vice-Chair.

If there are two or more nominations, there will be an election by show of hands. The Chair will say the names of the nominees in alphabetical order by surname. After each name is announced there will be a show of hands by those wishing to cast a vote for that candidate. Board members shall only vote for one candidate. Candidates are allowed to vote for themselves.

The Administrative Assistant will record the number of votes for each candidate. The candidate with the most votes will be declared to be the new Vice-Chair.

If there is a tie for the most votes cast, the name of each candidate who is tied will be written on a slip of paper by the Manager and the slips will be placed in a hat. The Administrative Assistant will draw one slip and the name on that slip will be declared as the new Vice-Chair.

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The Chair will ask for a motion confirming the appointment of the successful candidate as Vice-Chair.

Immediately after the election of the Vice-Chair, the meeting will proceed with the rest of the business on the Agenda.

Respectfully submitted,



Rodney Bouchard, General Manager  
Union Water Supply System Joint Board of Management  
rb/kmj

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**THE UNION WATER SUPPLY SYSTEM**  
**JOINT BOARD OF MANAGEMENT**  
**MINUTES OF MEETING**  
**HELD DECEMBER 20, 2017 AT 9 AM**  
**IN KINGSVILLE COMMUNITY ROOM - KINGSVILLE ARENA**

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**Members Present:** Deputy Mayor MacDonald (Chair); Mayor Paterson, Councillors Jacobs, Verbeke - Leamington  
Mayor Nelson Santos (Vice-Chair); Councillors Gaffan, Neufeld, Patterson - Kingsville

**Members Absent:** Councillors Dunn and Hammond - Leamington  
Mayor McDermott - Essex  
Councillor Diemer - Lakeshore

**Staff Present:** John Kehoe - Leamington

**OCWA Staff Present:** Susan Budden, Dave Jubenville  
Dale Dillen, Ken Penney, Marco Albano (LSW)

**Call to Order:** 9:07 am

**Disclosures of Pecuniary Interest:** none

**Adoption of Council Minutes:**

**No. UW-57-17**

**Moved by:** Councillor Patterson

**Seconded by:** Councillor Jacobs

That Minutes of the UWSS Joint Board of Management meeting of October 18, 2017 be received.

Carried

**Business Arising Out of the Minutes:**

There was none.

**Report UW/31/17 dated December 15, 2017 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works to December 15, 2017**

The Manager indicates that it has been a few months since the last UWSS meeting and as such many projects have been completed. He reviews those items including the installation of Low Lift Pump #2. However, upon inspection it was noted that there was a vibration in the new pump that was cause for some concern. The engineers will return to the site in January to evaluate.

The Manager notes that the old mechanical billing meters have all been replaced, with magnetic flow meters. Now communications between them and the Ruthven WTP can be completed and therefore the data will be available right at the WTP rather than sending employees out into the system to read them.

The temporary coagulant being used over the summer and late fall, Hyperion, to address high aluminum residuals in the treated water has now been switched back to the regular coagulant DelPac 2020. This was completed because of the decrease in the raw water temperature and pH which would allow the use of the regular coagulant without increasing aluminum results. He further explains that the aluminum residuals have been in the proper range since the switch.

An ongoing project throughout the year has been the removal of microstrainer #1 and installing an engineered floor over the large hole in the floor left by this equipment removal. The floor enclosure has now been completed and will provide staff with more space for potential lab and storage.

The Manager notes that annual maintenance on Clarifiers #1, #2 and #4 has been completed. Also there was an attempted break in at the Albuna Water Tower site during the weekend of November 11<sup>th</sup>-12<sup>th</sup>, 2017. The fence was pulled back and the handle on the door was ripped off. He noted that there is potential for injuries and therefore cameras have been installed at the Albuna Water Tower for security purposes/.

The MOECC inspections for both Kingsville and Leamington have been received, with Leamington receiving 100% and Kingsville receiving a 97.52%. Kingsville's result was not a reflection the quality of water.

The Manager then speaks on the SCADA replacement project. He notes that the three (3) proposals were received prior to the deadline. He reminds members that the budget was \$1.2 million. The lowest bid received was \$603,000 and the highest bid was \$1.7 million. He then confirms that an evaluation regarding the technical aspect of the proposals should be completed by January and results will be available for the next meeting.

He then discusses the pH Adjustment project and confirms that an updated report was received in late November. He confirms that staff are reviewing and evaluating options presented in the report. However, construction of a CO2 pH raw water adjustment system has been included in the proposed 2018 Capital Budget with a budget of \$950,000. This project is to improve the coagulant function and address the aluminum residual issue.



The Manager then reviews the flows for the year noting that they are down slightly from last year but well above budgeted flows for 2017.

The Board asks for a further explanation regarding the changeover of the coagulant. They are curious as to whether the change is seamless or are there noticeable affects? The Manager explains that everything is seamless and the change really depends on the temperature of the water. Once the raw water reaches a certain level then the change can occur with little or minimal affect.

#### **No. UW-58-17**

Moved by: Larry Verbeke

Seconded by: Mayor Santos

That report UW/31/17 dated December 15, 2017 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works to December 15, 2017 is received.

Carried (UW/31/17)

#### **Report UW/32/17 dated December 8, 2017 re: Proposed 2018 UWSS Operations and Capital Budget**

The Manager reviews his report for the proposed 2018 UWSS Budget. He reviews the report highlights, revenues and other figures, such as reserve income and investments. He reminds members that in 2017 the UWSS transferred \$10 million into a GIC with the WFCU earning 2.55% and the remainder of the funds are sitting in a bank account earning 1.95%, which is still earning more than they had been previously.

He then reviews the UWSS expenditures and notes that there is an anticipated surplus of \$1.926 million, however, this is due to several large capital projects that were delayed and will be implemented in 2018.

The Manager does indicate that the capital program is robust for 2018 coming in at \$3.925 million, however this includes two (2) very large projects, which were not completed in 2017 (the Essex Water Tower rehabilitation and the SCADA system upgrade). He reminds members that this information has been brought to their attention earlier in 2017.

There is then a brief discussion regarding the reserves and how much money will be taken from them in order to cover some of the projects. The Manager indicates that yes there will be some monies taken from the reserves, however he is anticipating returning some of the monies through surplus revenues.

The Manager also informs members that looking into the 6 Year Capital Plan they will note that those years will be capital heavy. Councillor Patterson again notes that the watermain from Ruthven to Cottam is in need of replacement as it is prone to leaking and supports this being a priority. He asks if there is any funding that is available for this project. The Manager reminds members that with the UWSS structured the way it is there is no government funding available. Perhaps with the possible restructuring UWSS will qualify for some of the funding that is out there.

The Manager then answers questions regarding specific things. For example there is a question regarding the budget item for kitchen renovations. He notes that right now the kitchen is very small, which gets very crowded as everyone eats at the same time. It was built in 1960 so it is very old. He is hoping to make better use of a different space and turn the current kitchen into storage/lab area.

There is a question regarding the operations contract assessment. The Manager reminds members of the board that the OCWA Operating Contract is due to expire at the end of 2018. He feels it is everyone's interest to have a review to ensure that UWSS is receiving the best approach. Once that happens then negotiations can begin. There is a brief discussion regarding the length of the OCWA contract, which currently sits at five (5) years, with the option to extend.

The members note there is no money for restructuring. The Manager explains that he is still awaiting comments from the member municipalities and they have committed to mid-January 2018 for those responses. Once a decision has been made on whether to move forward (by the municipalities) then a report on next steps for restructuring, including costs, will be brought forth to the UWSS Board for approval.

#### **No. UW-59-17**

Moved by: Councillor Patterson

Seconded by: Councillor Jacobs

That the Union Water Supply System Joint Board of Management (UWSS Board) adopts the Draft 2018 Operational and Capital Budget for the Union Water Supply System;

And further, that the UWSS Board endorses an increase of \$0.05 per thousand gallons (\$0.0109 per cubic metre) for UWSS wholesale Rate 1 from \$2.72 per thousand gallons (\$0.5978 per cubic metre) to \$2.77 per thousand gallons (\$0.6088 per cubic metre) to be put into effect on April 1, 2018.

Carried (UW/32/17)

#### **Dates for the Union Water Supply System Joint Board of Management 2018 meetings**

The dates provided are for information purposes.

**Report UW/33/17 dated December 15, 2017 re: Payments from October 13 to December 15, 2017**

#### **No. UW-60-17**

Moved by: Mayor Paterson

Seconded by: Councillor Gaffan

That report UW/33/17 dated December 15, 2017 re: Payments from October 13 to December 15, 2017 are received.

Carried (UW/33/17)

**Adjournment**

No. UW-61-17

Moved by: Councillor Neufeld

Seconded by: Councillor Gaffan

That the meeting adjourn at 9:39 am

Carried

**Date of Next Meeting:** Wednesday, January 17, 2018 at 9:00 am in the Community Room of the Kingsville Arena

/kmj

UW/02/18

**To:** Chair and Members of the Union Water Supply System Joint Board of Management

**From:** Rodney Bouchard, Union Water Manager

**Date:** February 16, 2018

**Re:** Status Update of UWSS Operations & Maintenance Activities and Capital Works to February 16, 2018



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**Aim:**

To inform the UWSS Board about operational and maintenance activities and capital works projects for the Union Water Supply System since the last Board meeting on December 20<sup>th</sup>, 2017.

**Discussion:**

The UWSS Manager conducts regular meeting with OCWA Operations staff in regards to on-going operations and maintenance programs for the UWSS facilities. The following provides an update on UWSS operations, regular maintenance and major maintenance and Capital Works at UWSS facilities:

1. Regular Maintenance on all process equipment and analyzers continue to be completed through OCWA's Workplace Maintenance Management System.
2. The new Low lift pump #2 purchased from ASL Roteq and installed still has a vibration that needs to be addressed. ASL completed a vibration analysis and has identified a possible solution to the problem. UWSS and OCWA operations staff are currently evaluating the best approach to resolve this problem and hope to have this issue resolved and the pump back in service sometime in March 2018.
3. High Lift pump #5 discharge pipe that connects to the main plant header has a small leak. The header will need to be isolated and drained to complete the repair. This job is scheduled for the week of March 19<sup>th</sup>, 2018
4. The initial preconstruction meeting for the Essex Tower Rehabilitation Project was held at the UWSS facility on January 17, 2017. The meeting included UWSS General Manager, OCWA UWSS Operations Staff, OCWA Engineering Services (engineer), JDCMI (contractor) and representatives from subcontractors. Scaffolding around the Essex Tower will start going up sometime in March, weather depending, in preparation for the sandblasting and painting. The tower will be taken off line and the Town of Essex will be fed hydraulically through two control valves starting April 16<sup>th</sup>, 2017. It is anticipated that the project will take 16 weeks to complete once erection of scaffolding is started.

Re: UW/02/18 - Status Update of UWSS Operations & Maintenance Activities and Capital Works to February 16, 2018

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5. The Request for Proposal Document (RFP) for SCADA System Upgrade closed on December 13<sup>th</sup>, 2017. The proposals were reviewed and evaluated by a team that consists of UWSS, OCWA (Union) and Associated Engineering representatives. The project was awarded to Summa Engineering of Mississauga whose proposal provided the best solution for the new UWSS SCADA system and was also the lowest cost proposal at \$686,383.47. It should be noted that the UWSS Board has approved a budget of \$1.2 million for this work.

A SCADA Upgrade project kickoff meeting was held at the UWSS Ruthven Water Treatment Plant on Monday February 12<sup>th</sup>, 2018. Representatives from Associated Engineering (Engineer/PM), Summa Engineering (SCADA contractor) and its subcontractor, UWSS and OCWA UWSS operations staff were present. The projected completion date for this work is October 2019.

6. Associated Engineering is currently working on the detailed design for the CO2 raw water pH adjustment system. A geotechnical study was completed at the Ruthven Water Treatment on December 18<sup>th</sup>, 2017 by CT Soil of Windsor, ON. The geotechnical study is needed to confirm the soil stability at the location where the CO2 tank will be staged. It is anticipated that detailed design will be completed in April 2018 and will be reviewed with the MOECC for approval.
7. An MOECC Inspection is currently underway for the Union Water Supply System. It anticipated that the inspection report and results will be provided to UWSS around the first week of March 2018.
8. A new Municipal Drinking Water License (MDWL Issue No. 6) has been issued for the Union Water Supply System. Additional environmental sampling and monitoring program requirements have been added to evaluate run-off from the residuals pile on the property.

Comparative Flows for 2014 through 2018 in Millions of Imperial Gallons (for the period 1 January to February 15, 2018)

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Flow to Date (MG)	295.59	269.95	258.16	269.19	304.34
Max Day (MGD)	8.36	7.15	6.46	7.15	7.96
Min Day (MGD)	4.19	3.79	4.29	4.56	5.18
Average Day (MGD)	6.43	5.87	5.61	5.85	6.62
No of Days	46	46	46	46	46

Flows to date are up 35.15 MIG or 13.06% from last year. The 2018 flows to date are up 11.39% over the previous 4 year average.

Re: UW/02/18 - Status Update of UWSS Operations & Maintenance Activities and  
Capital Works to February 16, 2018

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**Recommendation:**

That this report be received by the UWSS Board for information purposes.

Respectfully submitted,



Rodney Bouchard, Manager  
Union Water Supply System Joint Board of Management

rb/kmj

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UW/03/18

**To:** Chair and Members of the Union Water Supply System Joint Board of Management

**From:** Rodney Bouchard, Union Water Manager

**Date:** February 15, 2018

**Re:** 2017 Annual Report under the Safe Drinking Water Act and Ontario Regulation 170/03



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**Aim:**

To present to the Board the Annual Report for 2017 as required under Regulation 170/03 made under the Safe Drinking Water Act 2002.

**Background**

Section 11 of Regulation 170/03 made under the Safe Drinking Water Act 2002 requires that an Annual Report be prepared for a water system and submitted to any water systems that are supplied from that water system. This is required to be done before February 28 of the following year.

**Discussion**

The attached Annual Report has been prepared in accordance with O. Reg. 170/03. A copy has been provided to each of the four participating municipalities therefore satisfying the requirement that it must be received before February 28, 2017.

There were one instance in 2017 when the Union Water Supply System was out of compliance with the requirements of the Safe Drinking Water Act 2002.

- October 7, 2017 the Ruthven Water Treatment Plant experienced the loss of coagulation, due to pump failure. Maintenance personnel were called in to replace the faulted out coagulant pump and service was returned to normal.

**Recommendation:**

That the Board receive the Annual Report for 2017 prepared under Section 11 of Regulation 170/03 made under the Safe Drinking Water Act 2002.

Respectfully submitted,



Rodney Bouchard, P. Geo., Manager  
Union Water Supply System Joint Board of Management

Rb/kmj

Filename: t:\union wtr\reports to board\2018\uw03-18 annual report for 2017 (board report).docx



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**



**Annual Performance Report**

**Union Area Water Supply System**

**Drinking Water System # 210000853**

**2017**

Prepared for the Corporation of the Town of Kingsville, the Corporation of the Town of Essex,  
the Town of Lakeshore & the Municipality of Leamington

By the Ontario Clean Water Agency  
Ken Penney  
Process & Compliance Technician  
kpenney@ocwa.com  
519-326-4447





**ANNUAL REPORT**

<b>Drinking-Water System Number:</b>	<b>210000853</b>
<b>Drinking-Water System Name:</b>	Union Area Water Supply System
<b>Drinking-Water System Owner:</b>	Union Area Water Supply System Joint Board of Management (Municipality of Leamington, Town of Kingsville, Town of Essex, Town of Lakeshore)
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	01-January-2017 to 31-December-2017

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ]</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p><i>Union Water Treatment Plant P.O. Box 340, 1615 Union Ave., Ruthven, Ont. N0P 2G0</i></p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served: <input type="text" value="N/A"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ]</p> <p>Number of Interested Authorities you report to: <input type="text" value="N/A"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ <input type="checkbox"/> ] No [ <input type="checkbox"/> ]</p>
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**Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report**

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Municipality of Leamington	220004992
Town of Kingsville	220003403
Town of Essex	220003680
Town of Lakeshore	260004995



Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [ X ] No [ ]

Indicate how you notified system users that your annual report is available, and is free of charge.

- [X] Public access/notice via the web
[ ] Public access/notice via Government Office
[ ] Public access/notice via a newspaper
[X] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[X] Public access/notice via other method: Municipal Offices

Describe your Drinking-Water System

The Union Water Treatment Plant (UWTP) is a chemically assisted conventional filtration plant, which draws water from Lake Erie.
The UWTP supplies potable water to the Town of Kingsville, Municipality of Leamington, a portion of the Town of Essex and a portion of the Town of Lakeshore with an estimated service population of 65,000.
The treatment process includes chemically assisted up-flow clarification, filtration with dual media filters, primary disinfection using chlorine gas and secondary disinfection using chloramination.
Seasonally, the UWTP uses sodium hypochlorite at its intakes to control Zebra Mussel formation.
There are also four water towers and a booster/storage station located on the Union Water Supply System.

List all water treatment chemicals used over this reporting period

- Zebra Mussel Control:
• Sodium Hypochlorite – (Seasonal)
Clarification Chemicals:
• DelPAC – Coagulant
• Hyper+Ion 1090 – Coagulant
• Magnafloc LT22S (polymer) - Coagulant Aid
• Powdered Activated Carbon – Taste and Odor Control
Filtration:
• Cat-Floc 8103 Plus (polymer) – Filter Aid (Seasonal)
Disinfection:
• Primary: Chlorine Gas
• Secondary: Aqua Ammonia & Chlorine (to form chloramines)

**Were any significant expenses incurred to?**

- Install required equipment
- Repair required equipment
- Replace required equipment

**Please provide a brief description and a breakdown of monetary expenses incurred**

Item	Cost
Low Lift Pump #2 Major Maintenance	\$51,507
Low Lift Generator/Electrical Upgrades	\$9,404
Treatment Plant Electrical Upgrades	\$10,429
Clarifier #2 valve upgrade	\$2,580
Clarifier #3 Blow Off Valve and Turbine Gear Box	\$8,473
Clarifier #3 Turbine VFD	\$2,219
Treatment Plant Building Upgrades - New floor in old microstrainer room	\$20,332
Perimeter fencing upgrades - Treatment Plant and Cottam Booster	\$5,694
Filter Meter Replacements	\$18,100
Filter Media Replacement -Filters 5 and 7	\$122,034
Turbidity Meter Replacements	\$25,225
Filter Turbidity Meters - New	\$9,543
Chlorine Analyzer Replacements	\$18,269
Ammonia Storage Tank Level Transmitter	\$3,777
Chlorine Feed Room - New Heater	\$1,593
High Lift Pump #3 Rehabilitation	\$31,539
High Lift Compressor #1 Replacement	\$11,719
Window Replacements - Treatment Plant	\$24,046
Essex Water Tower Rehabilitation Project	\$19,131
Master Water Meter Replacements/Upgrades	\$56,595
SCADA System Upgrade	\$29,167
<b>Total Capital Works/Major Maintenance</b>	<b>\$481,375</b>

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Incident description	Corrective Action	AWQI #	Corrective Action Date
October 7, 2017	Loss of coagulant	Re-initialized coagulant	137144	October 10, 2017

Note: Corrective action Date is Date of resolution.

Microbiological testing is done under Schedule 10 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of Ecoli Or Fecal Results (min #)-(max #) (ct/100 mL)	Range of Total Coliform Results (min #)-(max #) (ct/100 mL)	Number of HPC Samples	Range of HPC Results (min #)-(max #) (ct/mL)
Raw	52	2 - 56	14 - 400	0	N/A
Treated	52	0 - 0	0 - 0	52	<10 - 30
Distribution	Please See Individual Annual Reports for Distribution System Information: Leamington (220004992), Kingsville (220003403), Essex (220003680), and Lakeshore (260004995).				

Operational testing is done under Schedule 7 of Regulation 170/03 during the period Covered by this annual report.

	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity	8760	0.02 – 1.96 NTU
Chlorine - Free	8760	1.51 – 2.28 mg/L
Fluoride (If the DWS provides fluoridation)	N/A	N/A

*NOTE: For continuous monitors use 8760 as the number of samples.*

*NOTE: Record the unit of measure if it is not milligrams per litre.*



**Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.**

Date of legal instrument issued	Parameter: (Suspended Solids)	Date Sampled	Result	Unit of Measure
09- June- 2017 Municipal Drinking Water Licence Number: 041-101	North Settling Pond	Jan 03/17	<3.0	mg/L
	North Settling Pond	Jan 30/17	<3.0	mg/L
	North Settling Pond	Feb 06/17	3.0	mg/L
	North Settling Pond	Mar 06/17	<3.0	mg/L
	South Settling Pond	Mar 06/17	<3.0	mg/L
	North Settling Pond	April 03/17	<3.0	mg/L
	North Settling Pond	May 01/17	<3.0	mg/L
	North Settling Pond	June 05/17	<3.0	mg/L
	North Settling Pond	July 04/17	<3.0	mg/L
	North Settling Pond	Aug 08/17	<3.0	mg/L
	North Settling Pond	Sept 05/17	<3.0	mg/L
	South Settling Pond	Oct 02/17	6.0	mg/L
	North Settling Pond	Oct 02/17	<3.0	mg/L
	South Settling Pond	Nov 06/17	<3.0	mg/L
	North Settling Pond	Nov 06/17	<3.0	mg/L
South Settling Pond	Dec 04/17	<3.0	mg/L	
Limit 25.0 mg/L		Annual Average:	3.2	mg/L

**Summary of Inorganic parameters tested during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	January 10, 2017	0.12	ug/L	No
Arsenic	January 10, 2017	0.4	ug/L	No
Barium	January 10, 2017	16.0	ug/L	No
Boron	January 10, 2017	18.0	ug/L	No
Cadmium	January 10, 2017	0.019	ug/L	No
Chromium	January 10, 2017	0.82	ug/L	No
*Lead	n/a			
Mercury	January 10, 2017	0.01	ug/L	No
Sodium	January 10, 2017	7.60	mg/L	No
Selenium	January 10, 2017	0.12	ug/L	No
Uranium	January 10, 2017	0.141	ug/L	No
Fluoride	January 10, 2017	0.13	mg/L	No
Nitrite (N)	December 27, 2017	< 0.1	mg/L	No
Nitrate (N)	December 27, 2017	0.5	mg/L	No
Nitrite + Nitrate (N)	December 27, 2017	0.5	mg/L	No
Ammonia (N) - Total	December 27, 2017	0.25	mg/L	No

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems



**Summary of lead testing under Schedule 15.1 during this reporting period**

(Applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	Please See Individual Annual Reports for Distribution System Information: Leamington (220004992), Kingsville (220003403), Essex (220003680), and Lakeshore (260004995).		
Distribution	Please See Individual Annual Reports for Distribution System Information: Leamington (220004992), Kingsville (220003403), Essex (220003680), and Lakeshore (260004995).		

**Summary of Organic parameters sampled during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	January 10, 2017	0.02	ug/L	No
Atrazine + N-dealkylated metabolites	January 10, 2017	0.01	ug/L	No
Atrazine	January 10, 2017	0.01	ug/L	No
Azinphos-methyl	January 10, 2017	0.05	ug/L	No
Benzene	January 10, 2017	0.32	ug/L	No
Benzo(a)pyrene	January 10, 2017	0.004	ug/L	No
Bromoxynil	January 10, 2017	0.33	ug/L	No
Carbaryl	January 10, 2017	0.05	ug/L	No
Carbofuran	January 10, 2017	0.01	ug/L	No
Carbon Tetrachloride	January 10, 2017	0.16	ug/L	No
Chlorpyrifos	January 10, 2017	0.02	ug/L	No
Desethyl atrazine	January 10, 2017	0.01	ug/L	No
Diazinon	January 10, 2017	0.02	ug/L	No
Dicamba	January 10, 2017	0.20	ug/L	No
1,2-Dichlorobenzene	January 10, 2017	0.41	ug/L	No
1,4-Dichlorobenzene	January 10, 2017	0.36	ug/L	No
1,2-Dichloroethane	January 10, 2017	0.35	ug/L	No
1,1-Dichloroethene (vinylidene chloride)	January 10, 2017	0.33	ug/L	No
Dichloromethane	January 10, 2017	0.35	ug/L	No
2-4 Dichlorophenol	January 10, 2017	0.15	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	January 10, 2017	0.19	ug/L	No
Diclofop-methyl	January 10, 2017	0.40	ug/L	No
Dimethoate	January 10, 2017	0.03	ug/L	No
Diquat	January 10, 2017	1.0	ug/L	No
Diuron	January 10, 2017	0.03	ug/L	No
Glyphosate	January 10, 2017	1.0	ug/L	No
HAA (NOTE: show latest annual average)	Please See Individual Annual Reports for Distribution System Information: Leamington (220004992), Kingsville (220003403), Essex (220003680), and Lakeshore (260004995).			



<b>Summary of Organic parameters sampled during this reporting period or the most recent sample results continued</b>				
<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Malathion	January 10, 2017	0.02	ug/L	No
MCPA	January 10, 2017	0.12	ug/L	No
Metolachlor	January 10, 2017	0.01	ug/L	No
Metribuzin	January 10, 2017	0.02	ug/L	No
Monochlorobenzene	January 10, 2017	0.3	ug/L	No
Paraquat	January 10, 2017	1.0	ug/L	No
Pentachlorophenol	January 10, 2017	0.15	ug/L	No
Phorate	January 10, 2017	0.01	ug/L	No
Picloram	January 10, 2017	1.0	ug/L	No
Polychlorinated Biphenyls(PCB)	January 10, 2017	0.04	ug/L	No
Prometryne	January 10, 2017	0.03	ug/L	No
Simazine	January 10, 2017	0.01	ug/L	No
<b>THM</b> (NOTE: show latest annual average)	Please See Individual Annual Reports for Distribution System Information: <b>Leamington (220004992), Kingsville (220003403), Essex (220003680), and Lakeshore (260004995).</b>			
Terbufos	January 10, 2017	0.01	ug/L	No
Tetrachloroethylene	January 10, 2017	0.35	ug/L	No
2,3,4,6-Tetrachlorophenol	January 10, 2017	0.20	ug/L	No
Triallate	January 10, 2017	0.01	ug/L	No
Trichloroethylene	January 10, 2017	0.44	ug/L	No
2,4,6-Trichlorophenol	January 10, 2017	0.25	ug/L	No
Trifluralin	January 10, 2017	0.02	ug/L	No
Vinyl Chloride	January 10, 2017	0.17	ug/L	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
<b>None</b>			

UW/04/18

**To:** Chair and Members of the Union Water Supply System Joint Board of Management

**From:** Rodney Bouchard, Union Water Manager

**Date:** February 15, 2018

**Re:** 2017 Summary Report for Municipalities under Regulation 170/03 made under the Safe Drinking Water Act



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**Aim:**

To provide to the Board a Summary Report for Municipalities for 2017 as required under Schedule 22 of Regulation 170/03 made under the Safe Drinking Water Act 2002.

**Background**

Schedule 22 of O. Reg. 170/03 requires a water system owner to prepare a "Summary Report for Municipalities". This requirement is applicable only to large and small municipal residential water systems. The UWSS is classified as a large municipal residential water system since it provides drinking water to greater than 10,000 year round residents.

The Summary Report for the preceding year is to be prepared and issued by March 31 of the following year.

The Summary Report must be distributed by the owner of the water system. In particular it must be given to the council or board that owns the system. There are three ownership cases described under the Schedule:

- If the water supply is owned by a municipality then all members of council are to receive the report.
- If owned by a municipal service board established under Section 195 of the Municipal Act, 2001 then all members of that board are to receive the report.
- If owned by a corporation then the board of directors is to receive the report.

Although not explicitly covered by any of the situations above, the UWSS Board is clearly the owner of the Union Water Supply System for the purposes of the regulation.

Also, where a water system provides potable water to another system under contract then the owner of the supplying system shall give, by March 31, a copy of the Summary Report to the system being supplied. Since UWSS provides drinking water to the local municipal drinking water systems owned and operated by the Town of Lakeshore, Town of Essex, Town of Kingsville and Municipality of Leamington



February 16, 2018 - UW/04/18

Re: 2017 Summary Report under the SDWA and Ontario Reg. 170/03

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The contents of the Summary Report for Municipalities must include the following:

1. A list of the requirements of the Safe Drinking Water Act and its Regulations that the water system failed to meet during the year covered including the duration of the failure.
2. A list of the requirements of the water system's Certificate of Approval, drinking water works permit or municipal drinking water license that the water system failed to meet during the year covered including the duration of the failure.
3. A list of any Orders that the water system failed to meet during the year covered including the duration of the failure.
4. For each of the above failures, a description of the measures taken to correct the failures.
5. A summary of the quantities and flow rates of the water supplied during the year covered "including monthly average and maximum daily flows and daily instantaneous peak flow rates." (Information is to enable the owner to assess the capability of the water system to meet existing and future uses.).
6. A statement that captures the comparison of the flow information above to the rated capacity and flow rates approved in the water supply's approval.

### Discussion

The attached Summary Report fulfils the requirements of Schedule 22 listed above. It will also fulfil the requirements for the municipalities when it is presented to each municipal council for the municipal water supply system supplied with water by the Union Water Supply System if council so wishes.

The UWSS and its participating municipalities were in compliance with all requirements of Ontario Drinking Water legislation and regulations in 2017, except for the noted occurrences in the Summary Report.

### Recommendation

That the Board receive the Summary Report for 2017 which fulfils the requirements of Schedule 22 of Ontario Regulation 170/03; and

That the Summary Report be forwarded to the four participating municipalities namely the Town of Kingsville, Town of Essex, Town of Lakeshore, and Municipality of Leamington.

Respectfully submitted,



Rodney Bouchard, P. Geo., Manager  
Union Water Supply System Joint Board of Management

rb/kmj

Filename: t:\union wtr\reports to board\2018\uw04-18 summary report for 2017 (board report).docx

## UNION WATER SUPPLY SYSTEM SUMMARY REPORT 2017

For the Union Water Supply System  
(Made under Schedule 22 of Ontario Regulation 170/03, a regulation made under  
the Safe Drinking Water Act, 2002)

### **EXPLANATION**

Schedule 22 of Ontario Regulation 170/03, a regulation made under the Safe Drinking Water Act, 2002 requires that a large municipal residential drinking-water system must provide to its board members a Summary Report on various aspects of the system before March 31 of the following year. The Union Water Supply System is classed as a large municipal residential drinking-water system and all of the municipal water systems that obtain water from it are classified as large municipal residential drinking-water systems and are therefore subject to Schedule 22.

The Summary Report must list the following:

- The requirements of the Safe Drinking Water Act, 2002 that the system failed to meet during the period covered by the Summary Report
- The requirements of the regulations made under the Safe Drinking Water Act, 2002 that the system failed to meet during the period covered by the Summary Report
- Any condition of the drinking-water system's drinking water works permit or municipal drinking water license that the system failed to meet during the period covered by the Summary Report
- Any order that the system failed to meet during the period covered by the Summary Report, the duration of any such failure and any measures that were taken to correct such failure
- A summary of the quantities and flow rates of water supplied by the drinking-water system by monthly average and maximum daily flow rates and instantaneous peak flow rates
- A comparison of actual flow rates with rated capacity and flow rates in the systems approval

A drinking-water system that supplies water to another drinking water system must provide a copy of the Summary Report to that system's owner by March 31 of the year following the year covered in the Summary Report.

The sections below details the occasions on which the Union Water Supply System (UWSS) and the connected municipal water systems failed to meet the requirements of the Safe Drinking Water Act 2002, associated regulations, system approvals and provincial officer orders in 2017.

### **Union Water Supply System (UWSS)**

The following provides details of occurrences where the Union Water Supply System was not in compliance with the requirements of the Safe Drinking Water Act 2002, associated regulations, system approvals and provincial officer orders.

**Non-Compliance Item:**

The following Adverse Water Quality Incident (AWQI) identified for the Union Water Supply System.

- AWQI #137144 - October 7, 2017 failure to maintain coagulant continuously. It was discovered that coagulant was not flowing continuously to Clarifier #1 for approximately one hour (1) and six (6) minutes, due to pump failure. Maintenance personnel was called in to replace faulted out coagulant pump.

**Leamington Water Distribution System**

**Non-Compliance Item:**

The following Adverse Water Quality Incident (AWQI) identified for the Leamington Distribution System that is supplied by the Union Water Supply System.

- AWQI #133147 - May 24, 2017 - Bacti adverse at sample station SS-L-17 with 7 Total Coliform. Town of Leamington staff flushed affected area, then a set of samples were taken upstream and downstream. A second set of samples were taken 24 hours later upstream and downstream. All results returned were within normal parameters.

**Kingsville Water Distribution System**

**Non-Compliance Item:**

The following Adverse Water Quality Incident (AWQI) identified for the Kingsville Distribution System that is supplied by the Union Water Supply System.

- AWQI #136615, 136667, 136715 - September 11, 2017, Bacti adverse at sample station SS-K-37 with 27 Total Coliform. Town of Kingsville staff flushed affected area, then samples were taken upstream and downstream, this set resulted in similar results. After consulting with MOH, MOECC, and the Town of Kingsville it was determined that SS-K-37 would be decommissioned. Flushing of the area then took place with resampling occurring upstream and downstream and all sets were returned clean. The sample station was replaced.

**Essex Water Distribution System**

**Non-Compliance Item:**

The following Adverse Water Quality Incident (AWQI) identified for the Essex Distribution System that is supplied by the Union Water Supply System

There were no non-compliances or AWQIs identified for the portion of the Town of Essex Water Distribution System that is supplied by Union Water Supply System:

**Lakeshore Water Distribution System**

There were no non-compliances or AWQIs identified for the portion of the Town of Lakeshore Water Distribution System that is supplied by Union Water Supply System.

**SUMMARY OF THE QUANTITIES AND FLOW RATES OF WATER SUPPLIED DURING THE PERIOD COVERED BY THE REPORT, INCLUDING MONTHLY AVERAGE AND MAXIMUM DAILY FLOWS, AND DAILY INSTANTANEOUS PEAK FLOW RATES**

The following sections provide information in regards to the Union Water Supply System's Permit to Take Water, issued under Ontario Regulation 387/04 and Drinking Water License issued under the Safe Drinking Water Act, 2002.

**Permit to Take Water**

The Union Water Supply System operated under Permit to Take Water (PTTW) Number 0816-9T9SVT, which expires at the end of 2025. The PTTW has the following flow conditions:

- Maximum Allowable Amount Taken per Minute (Litres/Min) 113,650
- Maximum Allowable Amount Taken Per Day (Litres/Day) 163,656,000

The maximum amounts of raw water taken during 2017 (see Table 1 below) are as follows:

- Maximum Amount Taken per Minute in 2017 (Litres/Min) 58,301
- Maximum Amount Taken Per Day in 2017 (Litres/Day) 83,305,000

The system did not exceed the PTTW limits in 2017.

**Drinking Water License**

The UWSS operates under Municipal Drinking Water Licence 041-01; issue Number 4 which has been issued for the period July 21, 2014 to July 20, 2019. The Certificate of Approval and licence had the following condition:

- The drinking water system shall not be operated to exceed 124,588 m<sup>3</sup>/d (27.4 MIGD) on any calendar day, conveyed from the treatment system to the distribution system.
- The maximum daily volume of water pumped into the distribution system was 71,369 m<sup>3</sup> (15.699 MIGD).

Tables 1A through 3B below provide the monthly average, maximum and peak flows for raw and treated water for the Union Water Supply System.

**Table 1A**  
**2017 Raw Water Taking from Lake Erie in Metric Units**

	Maximum Allowed Flow Rate (m3/Day)	Average Flow (m3/Day)	Maximum Flow (m3/Day)	Maximum Flow (Litres/Day)	Maximum Allowed Flow Rate (Litres/Minute)	Peak Flow (Litres/Minute)
January	163,656	26,142	29,149	29,149,230	113,650	22,190
February	163,656	29,283	35,152	35,152,110	113,650	26,923
March	163,656	39,006	55,091	55,091,000	113,650	38,692
April	163,656	43,874	57,132	57,132,000	113,650	41,054
May	163,656	53,188	70,399	70,399,000	113,650	55,126
June	163,656	63,804	77,473	77,473,000	113,650	51,974
July	163,656	64,390	79,899	79,899,000	113,650	58,302
August	163,656	65,565	83,305	83,305,000	113,650	52,792
September	163,656	57,747	65,218	65,218,000	113,650	45,630
October	163,656	39,964	54,609	54,609,000	113,650	39,938
November	163,656	33,826	49,324	49,324,000	113,650	33,690
December	163,656	26,631	32,016	32,016,000	113,650	23,297

**Table 1B**  
**2017 Raw Water Taking from Lake Erie in Imperial Units**

	Maximum Allowed Flow Rate (MGD)	Average Flow (MGD)	Maximum Flow (MGD)	Maximum Allowed Flow Rate (Gallons/Minute)	Peak Flow (Gallons/Minute)
January	36.00	5.75	6.41	25,000	4,881
February	36.00	6.44	7.73	25,000	5,922
March	36.00	8.58	12.12	25,000	8,511
April	36.00	9.65	12.57	25,000	9,031
May	36.00	11.70	15.49	25,000	12,126
June	36.00	14.03	17.04	25,000	11,433
July	36.00	14.16	17.58	25,000	12,825
August	36.00	14.42	18.32	25,000	11,613
September	36.00	12.70	14.35	25,000	10,037
October	36.00	8.79	12.01	25,000	8,785
November	36.00	7.44	10.85	25,000	7,411
December	36.00	5.86	7.04	25,000	5,125

**Table 2A****2017 Treated Water Flow Into Distribution System in Metric Units**

	Maximum Allowed Flow Rate (m <sup>3</sup> /Day)	Average Daily Flow (m <sup>3</sup> /Day)	Maximum Daily Flow (m <sup>3</sup> /Day)	Peak Instantaneous Flow (Litres/ Second)
January	124,588	26,216	30,358	549
February	124,588	28,861	36,013	693
March	124,588	33,409	42,082	809
April	124,588	41,486	54,647	936
May	124,588	47,261	59,866	954
June	124,588	59,397	73,513	1,207
July	124,588	56,419	71,831	1,086
August	124,588	60,555	75,568	1,171
September	124,588	54,303	60,665	1,013
October	124,588	37,694	52,269	853
November	124,588	28,329	34,044	571
December	124,588	25,525	28,877	538

**Table 2B****2017 Treated Water Flow Into Distribution System in Imperial Units**

	Maximum Allowed Flow Rate (MGD)	Average Daily Flow (MGD)	Maximum Daily Flow (MGD)	Peak Instantaneous Flow (Gallons/ Second)
January	27.4	5.77	6.68	121
February	27.4	6.35	7.92	152
March	27.4	7.35	9.26	178
April	27.4	9.13	12.02	206
May	27.4	10.40	13.17	210
June	27.4	13.07	16.17	265
July	27.4	12.41	15.80	239
August	27.4	13.32	16.62	258
September	27.4	11.95	13.35	223
October	27.4	8.29	11.50	188
November	27.4	6.23	7.49	126
December	27.4	5.62	6.35	118

**Table 3A**  
**2017 Treated Flow to Local Municipalities in Metric Units**

	<u>Leamington</u>		<u>Kingsville</u>		<u>Essex</u>		<u>Lakeshore</u>	
	Monthly Total (m3)	Average Day (m3/day)	Monthly Total (m3)	Average Day (m3/day)	Monthly Total (m3)	Average Day (m3/day)	Monthly Total (m3)	Average Day (m3/day)
January	425,775	13,735	376,442	12,143	71,879	2,319	54,548	1,760
February	374,735	12,922	317,719	10,956	50,985	1,758	27,251	940
March	447,717	14,442	462,007	14,903	56,366	1,818	30,665	989
April	590,523	19,684	718,261	23,942	69,864	2,329	39,879	1,329
May	584,997	18,871	659,310	21,268	62,804	2,026	36,036	1,162
June	839,259	27,975	711,916	23,731	78,680	2,623	53,257	1,775
July	849,905	27,416	681,655	21,989	78,627	2,536	47,378	1,528
August	1,054,891	34,029	913,392	29,464	95,961	3,096	55,034	1,775
September	758,065	25,269	666,601	22,220	63,404	2,113	37,723	1,257
October	624,761	20,154	497,964	16,063	58,256	1,879	49,614	1,600
November	439,918	14,664	311,137	10,371	64,169	2,139	32,158	1,072
December	426,147	13,747	289,099	9,326	65,493	2,113	54,548	1,760
<b>Total</b>	<b>7,416,693</b>	<b>20,242</b>	<b>6,605,503</b>	<b>18,031</b>	<b>816,488</b>	<b>2,229</b>	<b>518,091</b>	<b>1,412</b>

**Table 3A**  
**2017 Treated Flow to Local Municipalities in Imperial Units**

	<i><u>Leamington</u></i>		<i><u>Kingsville</u></i>		<i><u>Essex</u></i>		<i><u>Lakeshore</u></i>	
	Monthly Total (Imperial Gallons)	Average Day (MGD)	Monthly Total (Imperial Gallons)	Average Day (MGD)	Monthly Total (Imperial Gallons)	Average Day (MGD)	Monthly Total (Imperial Gallons)	Average Day (MGD)
January	93,657,407	3.02	82,805,664	2.67	15,811,170	0.51	11,998,883	0.39
February	82,430,176	2.84	69,888,410	2.41	11,215,132	0.39	5,994,382	0.21
March	98,483,972	3.18	101,627,332	3.28	12,398,787	0.40	6,745,357	0.22
April	129,896,900	4.33	157,995,332	5.27	15,367,932	0.51	8,772,154	0.29
May	128,681,350	4.15	145,027,925	4.68	13,814,949	0.45	7,926,812	0.26
June	184,611,171	6.15	156,599,627	5.22	17,307,180	0.58	11,714,902	0.39
July	186,952,964	6.03	149,943,138	4.84	17,295,522	0.56	10,421,703	0.34
August	232,043,580	7.49	200,918,152	6.48	21,108,469	0.68	12,105,788	0.39
September	166,750,988	5.56	146,631,721	4.89	13,946,930	0.46	8,297,900	0.28
October	137,428,208	4.43	109,536,767	3.53	12,814,529	0.41	10,913,554	0.35
November	96,768,432	3.23	68,440,572	2.28	14,115,207	0.47	7,073,771	0.24
December	93,739,235	3.02	63,592,890	2.05	14,406,446	0.46	11,998,883	0.39
<b>Total</b>	<b>1,631,444,384</b>	<b>4.45</b>	<b>1,453,007,530</b>	<b>3.97</b>	<b>179,602,252</b>	<b>0.49</b>	<b>113,964,088</b>	<b>0.31</b>



UW/05/18

**To:** Chair and Members of the Union Water Supply System Joint Board of Management

**From:** Rodney Bouchard, Union Water Manager

**Date:** February 16, 2018

**Re:** Payments for the UWSS from December 15, 2017 to February 16, 2018



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**Aim:**

To provide the Board with a copy of payments made by the Union Water Supply System from December 15, 2017 to February 16, 2018

**Recommendation:**

For information purposes.

Respectfully submitted,



Rodney Bouchard, Manager  
Union Water Supply System Joint Board of Management  
rb/kmj

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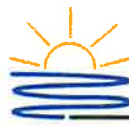


**Vendor :** 001410 To PT00000151  
**Batch :** All  
**Department :** All

**Cheque Print Date :** 20-Dec-2017 To 21-Dec-2017  
**Bank :** 07 To 08  
**Class :** All

Vendor Invoice	Vendor Name Description	Batch	Inv Date	Inv Due Date	Amount
G.L. Account	CC1 CC2 CC3 GL Account Name				
<b>DEPARTMENT 0700 Union Water System</b>					
<b>010103 ASSOCIATED ENGINEERING (ONT) LTD</b>					
523553	DAF PILOT STUDY	694	16-Dec-2017	21-Dec-2017	
70-5-0700-7989	002070 Operational Programs & Studies				5,070.93
523554	SCADA UPGRADES	694	16-Dec-2017	21-Dec-2017	
70-5-0700-7989	002070 Operational Programs & Studies				4,788.38
<b>020120 BELL MOBILITY CELLULAR</b>					
514877178-DE	MONTHLY CELL PHONES	693	01-Dec-2017	21-Dec-2017	
70-5-0700-7110	002070 002083 Telecommunications Usage				59.89
<b>030410 COLASANTI'S RESTAURANT</b>					
E07547	DONUTS FOR MEETING	694	20-Dec-2017	21-Dec-2017	
70-5-0700-7052	002070 Meeting Expenses				21.00
<b>200348 CORPORATION OF THE TOWN OF KINGSVILLE</b>					
W17-0013	JUN6/17 WATERMAIN BREAK-SEACLIFF DR	694	11-Dec-2017	21-Dec-2017	
70-7-0700-8750	002202 Watermains				59,031.11
<b>080143 HICKS MACPHERSON</b>					
6466	UWSS CASE WARE SETUP	693	29-Nov-2017	21-Dec-2017	
70-5-0700-7959	002070 UWSS Audit Fees				2,118.75
<b>080250 HYDRO ONE NETWORKS INC</b>					
2002 0889 906	NOV/17 HYDRO - METER #16	694	12-Dec-2017	21-Dec-2017	
70-5-0700-7420	002073 Electricity				-6.43
70-5-0700-7420	002073 Electricity				90.77
<b>160280 PHASOR INDUSTRIAL</b>					
18036	MOTOR - PUMP #2	694	31-Oct-2017	21-Dec-2017	
70-7-0700-8735	700050 Low Lift Station				4,229.42
<b>230440 WILLIS BUSINESS LAW</b>					
6948	RESTRUCTURING	694	30-Nov-2017	21-Dec-2017	
70-5-0700-7950	002070 Professional Services				6,613.04
6949	HIGHBURY CANCO OPINION	694	30-Nov-2017	21-Dec-2017	
70-5-0700-7950	002070 Professional Services				3,637.19
<b>230710 WOLSELEY CANADA INC</b>					
5830285	METER #3	694	31-Aug-2017	21-Dec-2017	
70-7-0700-8750	002205 Watermains				453.21
5881119	METERS #6, 8, 14, 27	694	18-Sep-2017	21-Dec-2017	
70-7-0700-8750	002205 Watermains				581.65
5890668	METERS 6, 8, 14, 27	694	20-Sep-2017	21-Dec-2017	
70-7-0700-8750	002205 Watermains				3,319.75
6220568	METER #3 (SPARE)	694	15-Dec-2017	21-Dec-2017	
70-7-0700-8750	002201 Watermains				202.92
99959491	RET'D WIDE DENSO TAPE - METER #3	694	05-Sep-2017	21-Dec-2017	
70-7-0700-8750	002201 Watermains				-4,529.72
<b>Department Totals :</b>					<b>85,681.86</b>

**MUNICIPALITY OF LEAMINGTON**  
**Council/Board Report By Dept-(Computer)**



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Vendor : 001410 To PT00000151  
 Batch : All  
 Department : All

Cheque Print Date : 02-Jan-2018 To 11-Jan-2018  
 Bank : 07 To 08  
 Class : All

Vendor Invoice	Vendor Name Description				Batch Invc Date	Invc Due Date	Amount
G.L. Account	CC1	CC2	CC3	GL Account Name			
<b>DEPARTMENT 0700 Union Water System</b>							
<b>030515 CUETS FINANCIAL</b>							
AMCTO-43116	MAP UNIT 4 REGISTRATION				715 01-Dec-2017	11-Jan-2018	
70-5-0700-7040	002070			Training			401.15
ZEHRS-DEC20	MILK				715 20-Dec-2017	11-Jan-2018	
70-5-0700-7052	002070			Meeting Expenses			2.49
<b>050003 E.L.K. ENERGY INC</b>							
40010915-NOV	984KWH - ESSEX WATER TOWER				715 05-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-12.07
70-5-0700-7420	002073			Electricity			170.54
40047150-NOV	297KWH - METER#9				715 05-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-4.58
70-5-0700-7420	002073			Electricity			64.70
51976611-NOV	NOV/17 - KINGSVILLE WATER TOWER				715 05-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-16.53
70-5-0700-7420	002073			Electricity			233.58
90006300-NOV	17520KWH - COTTAM BOOSTER STN				715 01-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			4,135.45
<b>050160 ESRI CANADA LIMITED</b>							
90115635	2018 ESRI MTCE				5 01-Jan-2018	04-Jan-2018	
70-5-0700-7260	002070	002131		Software Licensing & Support			1,841.90
<b>060975 FVB ENERGY INC</b>							
I005918	CHP PROJECT				715 30-Nov-2017	11-Jan-2018	
70-5-0700-7989	002075			Operational Programs & Studies			2,796.75
<b>080250 HYDRO ONE NETWORKS INC</b>							
200141680894	NOV/17 HYDRO - LEAM. WATER TOWER				715 28-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-24.28
70-5-0700-7420	002073			Electricity			343.09
200141681706	NOV/17 HYDRO - METER#2				715 27-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-3.31
70-5-0700-7420	002073			Electricity			46.74
200141682009	NOV/17 HYDRO - ALBUNA WATER TOWER				715 29-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-68.39
70-5-0700-7420	002073			Electricity			966.11
200141683019	NOV/17 HYDRO - METER#3				715 28-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-2.98
70-5-0700-7420	002073			Electricity			42.04
200141683120	NOV/17 HYDRO - METER#5				715 29-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-3.06
70-5-0700-7420	002073			Electricity			43.23
200141683423	NOV/17 HYDRO - METER#6				715 28-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-2.90
70-5-0700-7420	002073			Electricity			41.01
200141683524	NOV/17 HYDRO - METER#8				715 27-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-5.38
70-5-0700-7420	002073			Electricity			76.07
200141683726	NOV/17 HYDRO - METER#15				712 21-Dec-2017	04-Jan-2018	
70-5-0700-7420	002073			Electricity			-2.95
70-5-0700-7420	002073			Electricity			41.64
200141687362	NOV/17 HYDRO - METER#22				715 27-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073			Electricity			-2.35



Vendor : 001410 To PT00000151  
Batch : All  
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Cheque Print Date : 02-Jan-2018 To 11-Jan-2018  
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Vendor Invoice	Vendor Name Description	Batch	Inv Date	Inv Due Date	Amount
G.L. Account	CC1 CC2 CC3 GL Account Name				
<b>DEPARTMENT 0700 Union Water System</b>					
70-5-0700-7420	002073 Electricity				33.24
200141687766	NOV/17 HYDRO - METER#29		715 27-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073 Electricity				-3.24
70-5-0700-7420	002073 Electricity				45.66
200141687867	NOV/17 HYDRO - METER#24		715 27-Dec-2017	11-Jan-2018	
70-5-0700-7420	002073 Electricity				-2.35
70-5-0700-7420	002073 Electricity				33.21
200141690190	NOV/17 HYDRO - METER#26		712 22-Dec-2017	04-Jan-2018	
70-5-0700-7420	002073 Electricity				-12.04
70-5-0700-7420	002073 Electricity				170.14
200220161473	NOV/17 HYDRO - METER#14		712 20-Dec-2017	04-Jan-2018	
70-5-0700-7420	002073 Electricity				-2.62
70-5-0700-7420	002073 Electricity				37.00
<b>150365 ONTARIO CLEAN WATER AGENCY</b>					
INV000100017	UWSS M&T AND SCADA UPGRADES		715 20-Dec-2017	11-Jan-2018	
70-5-0700-7989	002075 Operational Programs & Studies				35,595.00
INV000100546	DEC/17 OPER&MTCE		715 31-Dec-2017	11-Jan-2018	
70-5-0700-6720	002071 OCWA Operating Contract				223,405.71
<b>160592 PUBLIC SECTOR DIGEST INC</b>					
9678	2018 CITYWIDE TANGIBLE ASSETS SOFTWARE		20 01-Jan-2018	11-Jan-2018	
70-5-0700-7260	002070 002131 Software Licensing & Support				3,005.80
<b>160610 PUROLATOR INC</b>					
436684661	ONTARIO CLEAN WATER		715 15-Dec-2017	11-Jan-2018	
70-5-0700-7010	002070 Office Supplies				4.43
<b>180325 RICOH CANADA INC</b>					
SCO91811544	COPIER CONTRACT - NOV21-DEC30		715 29-Dec-2017	11-Jan-2018	
70-5-0700-7010	002070 Office Supplies				92.80
<b>190185 SGS CANADA INC. ENVIRONMENTAL SERVICES</b>					
11119363	WATER QUALITY STUDIES CORROSION-UWSS		715 27-Dec-2017	11-Jan-2018	
70-5-0700-7989	002075 Operational Programs & Studies				355.95
11119381	WATER QUALITY STUDIES CORROSION-ESSEX		715 27-Dec-2017	11-Jan-2018	
70-5-0700-7989	002075 Operational Programs & Studies				98.31
11119480	WATER QUALITY STUDIES CORROSION-LAKESHORE		715 27-Dec-2017	11-Jan-2018	
70-5-0700-7989	002075 Operational Programs & Studies				98.31
11119483	WATER QUALITY STUDIES CORROSION-LEAMINGTON		715 27-Dec-2017	11-Jan-2018	
70-5-0700-7989	002075 Operational Programs & Studies				98.31
<b>190755 SUN LIFE ASSURANCE COMPANY OF CANADA</b>					
JAN-18	JAN/18 UNION WATER LOAN 3724:1		20 01-Jan-2018	11-Jan-2018	
70-5-0700-6000	002020 006901 Debenture Principal				17,909.52
70-5-0700-6100	002010 006901 Debenture Interest				120,896.92
<b>210120 UNION GAS LTD</b>					
NOV-DEC17 21	14684.670M3 GAS - RUTHVEN WTP		712 19-Dec-2017	04-Jan-2018	
70-5-0700-7410	002073 Gas				4,405.01
NOV-DEC17 21	1838.407M3 GAS - LOW LIFT		712 21-Dec-2017	04-Jan-2018	
70-5-0700-7410	002073 Gas				559.22
<b>Department Totals :</b>					<b>417,922.00</b>



Vendor : 001410 To PT00000151  
 Batch : All  
 Department : All

EFT Paid Date : 02-Jan-2018 To 11-Jan-2018  
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 Class : All

Vendor Code	Vendor Name				Batch	Inv Date	Inv Due Date	Amount
Invoice No.	Description							
G.L. Account	CC1	CC2	CC3	GL Account Name				
DEPARTMENT 0700	Union Water System							
050195	ESSEX POWERLINES CORPORATION							
220651-NOV17	29KWH - METER#4				712	20-Dec-2017	04-Jan-2018	
70-5-0700-7420	002073			Electricity				-3.20
70-5-0700-7420	002073			Electricity				45.27
<b>Department Totals :</b>								<b>42.07</b>



Vendor : 001410 To PT00000151  
 Batch : All  
 Department : All

Cheque Print Date : 26-Jan-2018 To 26-Jan-2018  
 Bank : 07 To 08  
 Class : All

Vendor Invoice	Vendor Name Description				Batch Invc Date	Invc Due Date	Amount
G.L. Account	CC1	CC2	CC3	GL Account Name			
<b>DEPARTMENT 0700 Union Water System</b>							
<b>010103 ASSOCIATED ENGINEERING (ONT) LTD</b>							
523668	SCADA UPGRADES - JAN12				31 16-Jan-2018	25-Jan-2018	
70-5-0700-7989	002070			Operational Programs & Studies			3,192.25
523672	CO2 PH SYSTEM - JAN12				31 16-Jan-2018	25-Jan-2018	
70-5-0700-7989	002070			Operational Programs & Studies			3,110.21
<b>030215 CANADIAN WATER AND WASTEWATER ASSOCIATION</b>							
2624	2018 MEMBERSHIP				31 11-Jan-2018	25-Jan-2018	
70-5-0700-7020	002070			Dues, Memberships and Subscriptions			1,772.97
<b>030458 CORRPRO CANADA INC</b>							
476510	RECTIFIER				725 31-Dec-2017	25-Jan-2018	
70-7-0700-8710				Kingsville Water Tower			10,434.42
<b>050020 ECODYNE LIMITED</b>							
123018	FILTER CAPS (6&8)				31 15-Jan-2018	25-Jan-2018	
70-7-0700-8730	700016			Filters			1,228.87
70-7-0700-8730	700018			Filters			1,228.88
<b>080250 HYDRO ONE NETWORKS INC</b>							
200208899066	DEC/17 HYDRO - METER #16				725 31-Dec-2017	25-Jan-2018	
70-5-0700-7420	002073			Electricity			-13.48
70-5-0700-7420	002073			Electricity			190.43
<b>150365 ONTARIO CLEAN WATER AGENCY</b>							
INV000101046	DEC/17 ADDITIONAL CHEMICAL CHARGES				725 31-Dec-2017	25-Jan-2018	
70-5-0700-6720	002071			OCWA Operating Contract			31,459.24
<b>210120 UNION GAS LTD</b>							
DEC-JAN18 17	1221.022M3 GAS - COTTAM BOOSTER STN				725 31-Dec-2017	25-Jan-2018	
70-5-0700-7410	002073			Gas			380.04
<b>230440 WILLIS LAW FIRM</b>							
7136	LEGAL FEES - RESTRUCTURING				725 31-Dec-2017	25-Jan-2018	
70-5-0700-7950	002070			Professional Services			536.75
<b>230690 WJF INSTRUMENTATION (1990) LTD</b>							
21609	TURBIDMETER FOR FILTERS				31 15-Jan-2018	25-Jan-2018	
70-7-0700-8745	700150			Treatment Plant			7,316.75
<b>Department Totals :</b>							<b>60,837.33</b>



Vendor : 0011450 To PT00000151

Batch : All

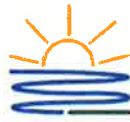
Department : All

Cheque Print Date : 05-Feb-2018 To 09-Feb-2018

Bank : 07 To 08

Class : All

Vendor Invoice	Vendor Name Description	Batch	Inv Date	Inv Due Date	Amount
G.L. Account	CC1 CC2 CC3 GL Account Name				
<b>DEPARTMENT 0700 Union Water System</b>					
<b>050003 E.L.K. ENERGY INC</b>					
40010915-JAN	961 KWH- ESSEX WATER TOWER	51	01-Feb-2018	09-Feb-2018	
70-5-0700-7420	002073 Electricity				-10.43
70-5-0700-7420	002073 Electricity				147.38
40047150-JAN	246KWH-METER#9	51	01-Feb-2018	09-Feb-2018	
70-5-0700-7420	002073 Electricity				-3.67
70-5-0700-7420	002073 Electricity				51.85
51976611-JAN	JAN/18 HYDRO-KINGSVILLE WATER TOWER	51	01-Feb-2018	09-Feb-2018	
70-5-0700-7420	002073 Electricity				-17.00
70-5-0700-7420	002073 Electricity				240.15
90006300-JAN	19680-KWH COTTAM BOOSTER STATION	51	01-Feb-2018	09-Feb-2018	
70-5-0700-7420	002073 Electricity				3,984.40
<b>130838 MUNICIPALITY OF LEAMINGTON</b>					
4775	COST RECOVERY - 114 OAK W	732	31-Dec-2017	08-Feb-2018	
70-7-0700-8750	002201 Watermains				33,150.80
530-17700	- FE TAXES - LEAMINGTON WATER TOWER	51	07-Feb-2018	09-Feb-2018	
70-5-0700-6750	002072 Property Tax				790.94
<b>150365 ONTARIO CLEAN WATER AGENCY</b>					
INV000101180	JAN/18 OPERATIONS AND MAINTENANCE	51	01-Jan-2018	09-Feb-2018	
70-5-0700-6720	002071 OCWA Operating Contract				239,708.00
<b>190185 SGS CANADA INC. ENVIRONMENTAL SERVICES</b>					
11127050	WATER QUALITY STUDIES CORROSION- ESSEX	51	30-Jan-2018	09-Feb-2018	
70-5-0700-7989	002075 Operational Programs & Studies				196.62
11127077	WATER QUALITY STUDIES CORROSION-UWSS	51	30-Jan-2018	09-Feb-2018	
70-5-0700-7989	002075 Operational Programs & Studies				593.25
11127094	WATER QUALITY STUDIES CORROSION-LAKESHORE	51	30-Jan-2018	09-Feb-2018	
70-5-0700-7989	002075 Operational Programs & Studies				98.31
11127101	WATER QUALITY STUDIES CORROSION-KINGSVILLE	51	30-Jan-2018	09-Feb-2018	
70-5-0700-7989	002075 Operational Programs & Studies				98.31
11127112	WATER QUALITY STUDIES CORROSION-LEAMINGTON	51	30-Jan-2018	09-Feb-2018	
70-5-0700-7989	002075 Operational Programs & Studies				98.31
<b>190755 SUN LIFE ASSURANCE COMPANY OF CANADA</b>					
FEB-18	FEB-18 UNION WATER LOAN 3724:1	51	01-Feb-2018	09-Feb-2018	
70-5-0700-6100	002010 006901 Debenture Interest				120,739.53
70-5-0700-6000	002020 006901 Debenture Principal				18,066.91
<b>Department Totals :</b>					<b>417,933.66</b>



Vendor : 0011450 To PT00000151  
 Batch : All  
 Department : All

EFT Paid Date : 05-Feb-2018 To 09-Feb-2018  
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 Class : All

Vendor Code	Vendor Name					Batch	Inv Date	Inv Due Date	Amount
Invoice No.	Description								
G.L. Account	CC1	CC2	CC3	GL Account Name					
DEPARTMENT 0700	Union Water System								
050195	ESSEX POWERLINES CORPORATION								
220651-JAN18	49KWH-METER#4				51	29-Jan-2018	09-Feb-2018		
70-5-0700-7420	002073			Electricity				-3.34	
70-5-0700-7420	002073			Electricity				47.12	
<b>Department Totals :</b>								<b>43.78</b>	