



JOINT BOARD OF MANAGEMENT

Wednesday, June 19, 2019
9:00 AM

Ruthven, Water Treatment Plant
1615 Union Ave
Ruthven, Ontario

AGENDA

- A. **Call to Order:**
- B. **Disclosures of Pecuniary Interest:**
- C. **Approval of Minutes:**
Minutes of the meeting of the Union Water Supply System Joint Board of Management Meeting held Wednesday, May 15, 2019
Pages 2 - 6
- D. **Business Arising Out of the Minutes**
- E. **Items for Consideration:**
 - 1. UW/18/19 dated June 14, 2019 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works to June 14, 2019
Pages 7 - 8
 - 2. UW/19/19 dated June 14, 2019 Energy Conservation Demand Management (CDM) Plan Update for UWSS Facilities
Pages 9 - 12
 - 3. UW/20/19 dated June 14, 2019 re: UWSS Secondary Disinfection Review
Pages 13 - 16
 - 4. UW/21/19 dated June 14, 2019 re: Payments from May 10 to June 14, 2019
Pages 17 - 22
- F. **New Business:**
- G. **Adjournment:**
- H. **Date of Next Meeting:** (proposed date) July 31, 2019, 9:00 am, Ruthven Water Treatment Plant, 1615 Union Ave., Ruthven, Ontario.



JOINT BOARD OF MANAGEMENT

Wednesday, May 15, 2019

9:00 AM

Ruthven Water Treatment Plant
1615 Union Avenue,
Ruthven

MINUTES

Members Present: Deputy Mayor MacDonald (Chair); Deputy Mayor Verbeke, Councillors Dunn, Hammond, Jacobs, Verbeke - Leamington Mayor Nelson Santos (Vice-Chair); Deputy Mayor Queen, Councillors DeYong, Gaffan (alternate), Patterson - Kingsville Councillor VanderDoelen - Essex Councillor Walstedt - Lakeshore

Members Absent: Councillor Neufeld - Kingsville

Staff Present: Shannon Belleau - Leamington
Shaun Martinho - Kingsville

OCWA Staff Present: Susan Budden, Dave Jubenville
Dale Dillen, Ken Penney

Call to Order: 9:02 am

Disclosures of Pecuniary Interest: none

Adoption of Board Minutes:

No. UW-23-19

Moved by: Deputy Mayor Verbeke

Seconded by: Councillor Jacobs

That Minutes of the UWSS Joint Board of Management meeting of April 24, 2019 be received.

Carried

Business Arising Out of the Minutes:

There was none.

Report UW/15/19 dated May 10, 2019 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works to May 10, 2019

The Manager reviews his report with board members. He notes that the Cottam Booster Station (CBS) grading project has been hampered by weather conditions. The drainage tiles have been installed and appear to be working, however, Rudak Excavating is waiting for a break in the weather to complete the soil coverings.

The SCADA project is moving forward and the Manager discusses the workshop that was attended by staff on April 24th and notes that the process narrative workshop took place on the 14th. The operations screens are now in production, this will show everything that is going on within the plant operations and things are moving along at a good pace.

The CO2 project is moving along as the contractors are working at the WTP location. The Manager notes that the microstrainer is almost completely removed, the chlorine header and scales have been removed to make way for the new pads. The weather has not been cooperating. The Manager reminds the board that the contractor has 40 weeks to complete the project.

The High Lift header was shut down on the previous Saturday to remove the old HL pump #7. The MOECP had made the recommendation and it is likely that this pump will never be replaced. HL pump #4 is now back in service and running with no issues.

The billing meters have been verified for accuracy by an external contractor on May 7th.

The valve control #9 (VC9) replacement is scheduled for the following week. OCWA is working with the municipal partners to inform the municipal customers of disruption. The Operations Manager then speaks to the board confirming that isolation valves will have to be used to shut off a section of piping to allow for work on the VC9. This will affect a good number of customers out in that area, but he is hoping the repairs run smoothly.

The HL pump #8 is currently out of service and the soft start part is ordered and should be back in service shortly.

The Manager notes that the flows have been down over the last month due to the very wet weather experienced by the area. He does note that the flows are still slightly above last year and the four year average.

The Board asks the Manager to further explain the shut down that occurred on the weekend and whether there could potentially be an issue of running out of water, and whether water is provided to customers. The Manager confirms that he does not anticipate any issues with the water supply as the shut down is only temporary and there is enough storage in the system to last for a while.

No. UW-24-19

Moved by: Councillor Dunn

Seconded by: Councillor Patterson

May 15, 2019 UWSS Joint Board of Management Meeting Minutes Page 3
That report UW/15/19 dated May 10, 2019 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works to May 10, 2019 is received.

Carried (UW/15/19)

Report UW/16/19 dated May 10, 2019 re: Proposed New Operations and Maintenance Agreement between the Union Water Supply System and Ontario Clean Water Agency

The Manager reminds members of the Board that the operating contract with the Ontario Clean Water Agency (OCWA) was set to expire at the end of 2018. However over the last year an evaluation had been ongoing and he presented the options to the Board members in July of 2018. He explained at that time that there were three (3) options UWSS could consider: staying with OCWA, a private operator, or going in house. In the end the most feasible option is staying with OCWA. It was then confirmed that the negotiations would not be completed by the end of 2019 and therefore, the OCWA contract with the UWSS was extended for one year, to December 31, 2019.

The Manager has been in contact with various colleagues in the industry and other municipalities to determine the best management structures that are working well within the industry. He confirms that the best option is still to remain with OCWA. He also points out that OCWA has been with UWSS since the Transfer Order and therefore are experts on the UWSS system.

The Manager also reminds members of the board that the last contract, from 2014 to 2018, was a fixed fee contract. However, several things have changed during the time of the contract, the biggest being the change in Provincial Government Party.

The Manager then reviews the two (2) options available for the next contract: the Fixed Price and the Fixed Management Fee. The Fixed Price option is very similar to the current contract, with a same fee every year and then adjusted with the CPI. The Fixed Management Fee allows for a slightly less fee, but based on an operations budget (which are reconcilable at the end of the year), which includes capital allowance, chemicals allowance and will allow for modifications to the staffing at the WTP. The Management Fee is adjusted with the CPI and covers regional/corporate support, IT support and everything OCWA supports in the background.

The Manager points out that OCWA at the Ruthven WTP and UWSS staff work very closely everyday to ensure things are running smoothly and efficiently and he knows what is going on quite well.

The Manager recommends that the next contract is Option 2, the Fixed Management Fee Contract, for five (5) years and an option to have another five (5) year added to it. He also seeks approval for the additional costs for staff changes, which includes two (2) new positions and several position changes.

The Board wants clarification on how the new positions are being covered in terms of budget. The Manager confirms that the staff changes are covered in the budget. Some Board members express the importance of maintaining staff and increasing staffing positions.

May 15, 2019 UWSS Joint Board of Management Meeting Minutes
No. UW-25-19

Page 4

Moved by: Mayor Santos

Seconded by: Councillor Dunn

That the Union Water Supply Joint Board of Management receives this report for information; and further

That the Union Water Supply System Joint Board of Management (Board) award the Fixed Management Fee contract for Management, Operations and Maintenance of the Union Water Supply System (UWSS) to the Ontario Clean Water Agency (OCWA) for a period of five (5) years, subject to the Board's right to extend for a further five (5) year period, in the amount of \$3,260,545 (including an Operations estimate of \$2,863,500 and Fixed Fee of \$397,045) for the first year, retroactive to January 1, 2019; and further

That UWSS General Manager reports back to the Board when the full Operations & Maintenance Agreement between UWSS and OCWA has been drafted.

Carried (UW/16/19)

Report UW/17/19 dated May 10, 2019 re: Payments from April 18 to May 10, 2019

No. UW-26-19

Moved by: Councillor Jacobs

Seconded by: Councillor Walstedt

That the report UW/17/19 dated May 10, 2019 re: Payments from April 18 to May 10, 2019 is received.

Carried (UW/17/19)

New Business

Deputy Mayor Verbeke notes that he likes having the UWSS Board meetings at the Ruthven WTP. Therefore, he makes a motion to hold a few meetings at said location to see how it works out.

No. UW-27-19

Moved by: Deputy Mayor Verbeke

Seconded by: Councillor Patterson

That the June Board meeting be held at the Ruthven Water Treatment Plant.

Carried

Adjournment

Moved by: Councillor DeYong

Seconded by: Councillor Gaffan

That the meeting adjourn at 9:29 am

Carried

Date of Next Meeting: Wednesday, June 19, 2019 at 9:00 am, Ruthven Water Treatment Plant.

/kmj

UW/18/19

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

From: Rodney Bouchard, Union Water Manager

Date: June 14, 2019

Re: Status Update of UWSS Operations & Maintenance Activities and Capital Works to June 14, 2019



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.

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 completion of the Cottam Booster Reservoir soil cover rehabilitation project has been put on hold until late July or early August 2019; awaiting a longer stretch of dry weather to allow for the work to be done properly.
3. SCADA Upgrade Project Update: UWSS and pertinent OCWA operations staff attended a Factory Acceptance Test (FAT) meeting at the offices of the SCADA upgrade project integrator, SUMMA Engineering, in Mississauga, ON on May 30th, 2019. The purpose of the meeting was to "Factory Test" the process control narrative (PCN) for PLCs for the Albuna, Essex, Leamington and Kingsville Water Towers. A FAT meeting is scheduled at SUMMA's offices on June 20th, 2019 for testing of Cottam Booster/ Low Lift PCNs.
4. CO2 pH Adjustment/ Chlorine System Improvements Project Update - The contractor, Maple Reinders, has installed to concrete support foundations and pads for the 50-ton CO2 tank and for the Chlorine Scrubber. The contractor has also excavated and poured concrete foundations/installed underpinning for the Chlorine building expansion. Works over the next 4-6 weeks will include installation of CO2 injection chambers, installation of 50-ton CO2 storage tank, installation of engineered floor in former microstrainer #2 concrete tanks, and installation of CO2 dissolution and control skids.
5. The new soft start for High Lift pump #8 was installed and the pump was put back in service the week of June 3rd, 2019.

Re: UW/18/19 - Status Update of UWSS Operations & Maintenance Activities and Capital Works to June 14, 2019

6. Maintenance staff noted that High Lift Pump #6 motor had developed a significant vibration. The motor was removed the week of June 3rd, 2018 and is being refurbished by Phasor Industrial of Kingsville, ON.
7. The new control valve for Valve Chamber #9 (VC 9), which is one of two control valves (the other is VC 26) that control water flow to Essex Water Tower and Essex Centre, was put in service during the week of May 20th, 2019.
8. Operations staff switched coagulants on May 24th, 2019 due to increasing aluminum residuals. The new coagulant DeIPAC XG works better to keep aluminum residuals lower in warmer water.
9. Two new sodium hypochlorite injection pumps were installed on June 13th, 2019 at the low lift for the zebra/quagga mussel control systems for Intakes 1 and 2. These new pumps can handle the higher sodium hypo demand that is sometimes needed for mussel control or to address other water quality issues such as taste & odor, algae, etc.

Comparative Flows for 2015 through 2019 in Millions of Imperial Gallons (for the period 1 January to June 13, 2019)

	2015	2016	2017	2018	2019
Flow to Date (MG)	1305.75	1339.41	1356.87	1443.45	1423.98
Max Day (MGD)	12.75	15.57	16.16	15.52	15.01
Min Day (MGD)	3.79	4.29	4.56	5.18	4.43
Average Day (MGD)	7.96	8.12	8.27	8.80	8.68
No of Days	164	165	164	164	164

Flows to date are down 19.47 MIG or 1.34% from last year. The 2019 flows to date are up 4.6% over the previous 4 year average

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

/kmj

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UW/19/19

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

From: Rodney Bouchard, Union Water Manager

Date: June 14, 2019

Re: Energy Conservation Demand Management (CDM) Plan Update for UWSS Facilities



Recommendation

That the Union Water Supply System Joint Board of Management (UWSS Board) receives UWSS Report UW/19/19 *Energy Conservation Demand Management (CDM) Plan Update for UWSS Facilities* for information purposes; and

That the UWSS Board endorses in principle the goals of the draft *Union Water Supply System Energy Conservation and Demand Management Plan 2020-2024 Green Energy Act - Ontario Regulation 397/11* prepared by the Ontario Clean Water Agency (OCWA) for the Union Water Supply System.

Aim:

This report is to inform the UWSS Board of the UWSS Conservation Demand and Management Plan that has been prepared in draft form by the Ontario Clean Water Agency (OCWA) on behalf of the UWSS and will be finalized for submission to the Ontario Ministry of Energy, Northern Development and Mines by July 1, 2019.

Background:

In 2014, the Union Water Supply System (UWSS) developed a comprehensive Five Year Conservation and Demand Management (CDM) Plan for the system in compliance with the requirements of *Ontario Regulation 397/11* under the *Green Energy Act, 2009*. The 2014 CDM Plan was prepared by Ontario Clean Water Agency (OCWA). This initial CDM Plan was presented to the UWSS Board under *UWSS Board Report UW22-15 Green Energy Act - UWSS Conservation Demand Management Plan* at the July 2015. The UWSS Board endorsed the CDM Plan at that meeting.

Ontario Regulation 397/11 under the *Green Energy Act, 2009* has been replaced with *Ontario Regulation 507/18* under the *Electricity Act, 1998* in 2018. Under *Ontario Regulation 507/18*, all Broader Public Sector Organizations including municipalities, service boards and townships, are required to report annually on energy use and greenhouse gas (GHG) emissions. The organizations are also required to develop a CDM plan and update it every five years, with this first update due July 1, 2019.

The Ministry of Energy's O.Reg. 397/11, Energy Conservation and Demand Management Plans, requires all broader public sector organizations, including hospitals, municipalities, universities, colleges, school boards and municipal service boards to:

Re: UW/19/19 - Energy Conservation Demand Management (CDM) Plan Update for UWSS Facilities

- Report on their annual energy use and greenhouse gas emissions in designated buildings/facilities by July 1 of every year beginning in 2013; and
- Develop and implement 5-year energy conservation and demand management plan starting on July 1, 2014 with the first update due July 1, 2019; and
- Post annual reports and 5-year plans to the UWSS' website and make printed versions available to the public.

Discussion:

The UWSS retained OCWA to update the UWSS CDM Plan that was originally developed in 2014. The CDM update builds on the first CDM Plan and incorporates the experiences gained in energy conservation over the last five years. This updated CDM plan was developed as per the regulation and guidelines provided by Ministry of Energy, Northern Development and Mines and covers the period from 2020 to 2024.

As required by *Ontario Regulation 507/18* under the *Electricity Act, 1998* the UWSS has been submitting its annual energy usage (electricity and natural) to the Ontario Ministry of Energy, Northern Development and Mines via the Ministry's online reporting "portal". This information is also posted on the UWSS website (<http://www.unionwater.ca/energymanagement>) for public information purposes.

The Updated CDM Plan for 2020-2024, will be finalized by OCWA and submitted to the Ministry of Energy, Northern Development and Mines by the July 1, 2019 deadline. The CDM plan will also posted on the UWSS website for public information.

The CDM plan highlights the efforts and improvements that the UWSS has undertaken in recent years to reduce and manage energy usage more effectively. These efforts/improvements include the following:

- LED lighting retrofits at all UWSS facility;
- Low Lift and High Lift pump upgrades and refurbishments including new energy efficient pumps, analyzers, and equipment such as Variable Frequency Drives (VFDs);
- Replacement of windows at Ruthven Water Treatment Plant Building with energy efficient window;
- Installation of energy monitoring and targeting (M&T) system for the Low Lift Pumping Station (2018);
- Participating and support of the Essex Region Smart Water Project (ERSWP) project, in conjunction with the University of Windsor evaluate water management improvement processes and technologies (e.g. real time monitoring systems) thus also improving energy management;
- Participation into AMO's LAS Energy Procurement Programs to reduce energy costs for UWSS.

Re: UW/19/19 - Energy Conservation Demand Management (CDM) Plan Update for UWSS Facilities

The UWSS CDM plan identifies a short term energy reduction goal of 10%-13% by the end of 2021 from the 2014 baseline is established. Energy usage of each facility for the year 2021 will be compiled and compared to the baseline energy usage in 2014. The comparison would provide the UWSS an idea where it stands in meeting the short term goal and the long term goals. This also provides an opportunity to examine measures implemented and their effectiveness in reducing energy consumption at mid-term. A plan could be developed to further implement the successful measures for other facilities.

As a longer term goal, the UWSS will strive to reduce energy use by 13-15% by the end of 2024 as compared to the 2014 base year. The proposed UWSS efforts and improvements to achieve these goals include but are not limited to the following:

- Implementation of a Monitoring and Targeting system for the Ruthven Water Treatment plant in 2019. This will help operations staff to schedule the best times to fill water towers and reservoirs and chose which pumps to improve pumping efficiency thus reducing energy use where possible;
- Investigation renewable energy options, specifically solar energy generation with battery storage. It is anticipated that a study report on this initiative will be prepared and presented to the UWSS Board in Fall 2019
- Further upgrades and refurbishment to Low Lift, High Lift and Cottam Booster Pumps including installation of Variable Frequency Drives (VFDs) for these pumps where feasible;
- Continued Lifecycle replacement of water treatment process and monitoring equipment such as chlorine analyzers, turbidity meters, air compressors, etc. with more energy efficient models;
- Cooling system upgrades to incorporated more efficient units;
- Heating system upgrades;

The UWSS CDM plan is to be treated as a living document and will be reviewed each year to account for annual capital and operational improvements at UWSS facilities.

It should be noted that the draft UWSS CDM Plan 2020-2024 is currently being revised by OCWA and a copy will be provided to the Board under a separate cover.

Conclusion

It should be noted that energy reduction in drinking water treatment and pumping facilities can be tricky since energy consumption at such facilities is linked to water consumption. As water demand increases, such as on hot and sunny summer days, the more electricity is needed to treat and pump the water. Further, increased water demands typically occur during the hottest part of the day, which also usually coincides with peak electricity rates. However, the UWSS General Manager is of the opinion that the UWSS CDM Plan demonstrates that the UWSS is making all necessary efforts to reduce its overall energy consumption thus meeting or exceeding the regulatory requirements while also embodying the spirit of energy conservation.

Re: UW/19/19 - Energy Conservation Demand Management (CDM) Plan Update for
UWSS Facilities

Respectfully submitted,



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

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UW/20/18

Report

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

From: Rodney Bouchard, Union Water Manager

Date: June 14, 2019

Re: UWSS Secondary Disinfection Review



Recommendation:

That the Union Water Supply Joint Board of Management (UWSS Board) receives this report for information;

And further, that the Board approves a budget of \$40,000 to be funded from the 2019 UWSS Operations Reserve for the undertaking of the Secondary Disinfection evaluation and review;

And further, that the UWSS Board authorizes the UWSS General Manager to undertake a direct negotiation with Associated Engineering for the this work.

Background:

On June 4, 2018, the UWSS implemented a temporary switch of secondary disinfection from chloramination to free chlorine. This was done as part of our maintenance program to prevent any nitrification related water quality issues in the larger UWSS area distribution system. The UWSS Municipal Drinking Water License (MDWL) allows the UWSS to conduct these temporary switches in secondary disinfection on an annual basis for periods of up to 8 weeks.

The UWSS Board was previously informed of this initiative at the May 2018 UWSS Board meeting. The four municipalities of Essex, Kingsville, Lakeshore and Leamington that receive UWSS drinking water were also informed of this temporary switch in secondary disinfection via letter correspondence dated May 28, 2018 sent to the CAOs of each municipality.

At the July 2018 UWSS Board meeting, the UWSS Board was informed that the UWSS would be extending the use of free chlorine secondary disinfection to June 4, 2019 and that the UWSS had received permission for this extension from the Ontario Ministry of Environment, Parks and Conservation (MECP). The purpose of the extension was to allow for UWSS and OCWA to evaluate free chlorine secondary disinfection in the larger

June 14, 2019 - UW/20/19

Re: UWSS Secondary Disinfection Review

UWSS distribution system over a full year. Letter correspondence dated July 20, 2019 was sent to the CAOs of the four municipalities of Essex, Kingsville, Lakeshore and Leamington to inform them of this extension in free chlorine secondary disinfection and to solicit any comments from the municipalities regarding this initiative.

On April 9th, 2019, the UWSS General Manager convened a meeting with water department staff from the municipalities of Essex, Kingsville, Lakeshore and Leamington and OCWA Operations staff to discuss the results of the data collected during the June 4, 2018 to April 1, 2019 free chlorine secondary disinfection monitoring period. The monitoring results indicated that no water quality issues of note were noted in regards to the use of free chlorine secondary disinfection during that 10 month period. It was noted that a few complaints were received from the public in regards to “chlorine taste and odour” in the water, which is not unusual when using free chlorine secondary disinfection. At that meeting, there was basic consensus from attendees that free chlorine secondary disinfection would work well for the larger UWSS system and there was general support for the UWSS General Manager’s proposal to look at permanent use of free chlorine for secondary disinfection instead of chloramination. Further, at the conclusion of the April 9th, 2019 meeting, it was agreed by UWSS and municipal staff in attendance that it would be beneficial to conduct a third party consultant review of the 2018-2019 free chlorine secondary disinfection monitoring data and a review of historical secondary disinfection processes for UWSS.

At the April 2019 UWSS Board meeting, the UWSS General Manager informed the UWSS Board of the proposal extend the use of free chlorine secondary disinfection until December 4, 2019 to allow for additional evaluation during the summer period and to allow for review of the collected data by a third party consultant. The Board was also informed that the UWSS had notified and received approval from the MECP for this extension.

Discussion:

The UWSS General Manager has solicited a proposal from Associated Engineers (AE) to complete a review of historical secondary disinfection practices and performance at UWSS and undertake an evaluation of secondary disinfection strategy alternatives.

The UWSS General Manager is proposing AE for this evaluation based on the recent work AE has completed at the Ruthven Water Treatment Plant and thus their familiarity with the treatment process and concerns and also because of the expertise AE possesses in regards to water treatment and water quality.

The evaluation will consist of a review the water quality data collected over the past year and compare it to similar historical data collected while the plant was practicing chloramination. Water quality data and information to be reviewed will include:

June 14, 2019 - UW/20/19

Re: UWSS Secondary Disinfection Review

- Ruthven WTP finished water and distribution system water quality data including free and combined chlorine residuals, DBPs (i.e., THMs and HAAs), pH, alkalinity and CSMR;
- Logged taste and odour, colour and/or fixture staining complaints;
- UWSS recorded nitrification events and associated details;
- Chlorine and ammonia dosing rates;
- Chemical and O&M costs; and,
- InfoWater model data.

Upon review of background information, a structured decision-making principle will be applied to select the preferred secondary disinfection practice. A Triple Bottom Line (TBL) + risk evaluation decision making process will be used.

AE has identified the following Proposed Workplan for this evaluation:

Phase 1: Summary and Review of Historical Secondary Disinfection Practices and Performance

- Review history of secondary disinfection practices at UWSS, including nitrification events and the previous report that recommended chloramination over chlorination;
- Review and analyse historical water quality and operational data, including costs;
- Simulate InfoWater model for water age throughout the distribution system;
- Conduct in-person (one day) interviews with staff to better understand the challenges that operations have encountered with respect to secondary disinfection practices;
- Identify feasible secondary disinfection strategy alternatives;
- Summarize the above in draft technical memorandum (TM); and.

Phase 2: Evaluation of Secondary Disinfection Strategy Alternatives

- Identify draft evaluation criteria and weightings and share with UWSS for review;
- Develop conceptual-level design and cost estimate ($\pm 25\%$) for each feasible secondary disinfection strategy alternative (up to 3);
- Lead a one-day workshop at UWSS, including municipal water department staff from Essex, Kingsville, Lakeshore, and Leamington to review the evaluation criteria and weightings and subsequently evaluate short-listed alternatives;
- Recommend preferred alternative based on TBL+risk evaluation and workshop discussion;
- Summarize the information in a final Technical Memorandum;

It is proposed that the evaluation by AE would be initiated before the end of June 2019 and that a final report would be provided to UWSS by November 1, 2019. This timeline should provide adequate time to obtain necessary endorsements from the UWSS Board and municipalities of Essex, Kingsville, Lakeshore and Leamington of the evaluation report recommendations on preferred secondary disinfection methodology for UWSS.

June 14, 2019 - UW/20/19

Re: UWSS Secondary Disinfection Review

Financial Implications

Based on Associated Engineering preliminary proposal, the fee for completion of this evaluation is \$33,800 + HST. The UWSS General Manager proposes a budget of \$40,000 not including tax for this work to allow for unplanned items such as additional sampling and laboratory analysis that may be needed.

This budget for this proposed work is not included in the approved UWSS Operations and Capital Budgets as such approval by the UWSS Board of the proposed budget of \$40,000 is needed. Sufficient funds are available in the UWSS Operational Reserves to fund this work.

Closing Comments:

The UWSS General Manager recommends to completion of this third party consultant evaluation of secondary disinfection for UWSS so that the secondary disinfection method that is best suited for the larger UWSS system is implemented to ensure consistent, safe drinking water quality and minimize any issues such as corrosion, disinfection by-products, taste and odour, etc.

Based on the recent work Associated Engineering have completed at the Ruthven Water Treatment Plant and their familiarity with the treatment process and concerns, the UWSS General Manager recommends that this work be sole sourced to Associated Engineering through a direct negotiation.

Respectfully submitted,



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

rb/kmj

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UW/21/19

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

From: Rodney Bouchard, Union Water Manager

Date: June 14, 2019

Re: Payments for the UWSS from May 10th to June 14th, 2019



Aim:

To provide the Board with a copy of payments made by the Union Water Supply System from May 10th to June 14th, 2019.

Recommendation:

For information purposes.

Respectfully submitted,



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

rb/kmj

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Vendor : 0011450 To PT00000165
 Batch : All
 Department : All

Cheque Print Date : 16-May-2019 To 17-May-2019
 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				
DEPARTMENT 0700 Union Water System					
010103 ASSOCIATED ENGINEERING (ONT) LTD					
525681	SCADA UPGRADES - APR5	244	25-Apr-2019	16-May-2019	
70-7-0700-8780	SCADA System				18,043.56
525683	CO2 WATER PH ADJ SYSTEM - APR5	244	25-Apr-2019	16-May-2019	
70-7-0700-8745	700200 Treatment Plant				14,317.79
020120 BELL MOBILITY CELLULAR					
514877178-MA	MONTHLY CELL PHONE CHARGES	239	01-May-2019	16-May-2019	
70-5-0700-7110	002070 002083 Telecommunications Usage				21.56
040070 DEVINE & ASSOCIATES LIMITED					
55692	VC#9 - 8" VALVE	244	07-May-2019	16-May-2019	
70-7-0700-8750	002203 Watermains				6,682.55
050003 E.L.K. ENERGY INC					
40010915-APR	928KWH - ESSEX WATER TOWER	244	01-May-2019	16-May-2019	
70-5-0700-7420	002073 Electricity				-8.53
70-5-0700-7420	002073 Electricity				120.54
40047150-APR	126KWH - METER#9	244	01-May-2019	16-May-2019	
70-5-0700-7420	002073 Electricity				-2.31
70-5-0700-7420	002073 Electricity				32.61
51976611-APR	2373KWH - KINGSVILLE WATER TOWER	244	01-May-2019	16-May-2019	
70-5-0700-7420	002073 Electricity				-22.90
70-5-0700-7420	002073 Electricity				323.60
90006300-APR	15360KWH - COTTAM BOOSTER STATION	244	01-May-2019	16-May-2019	
70-5-0700-7420	002073 Electricity				2,407.35
997507 JDC.CA INC					
10045	KWT/EWT/V9/V26 COMMUNICATIONS UPGRADE	670	30-Nov-2018	19-Dec-2018	
70-7-0700-8775	Communication System				5,256.66
10047	LOW LIFT COMMUNICATION UPGRADES	670	30-Nov-2018	19-Dec-2018	
70-7-0700-8775	Communication System				384.37
180325 RICOH CANADA INC					
SCO92374596	COPIER CONTRACT - MAR19-APR30	244	30-Apr-2019	16-May-2019	
70-5-0700-7010	002070 Office Supplies				96.19
Department Totals :					47,653.04



Vendor : 0011450 To PT00000165
Batch : All
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EFT Paid Date : 16-May-2019 To 17-May-2019
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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								
080250 HYDRO ONE NETWORKS INC								
200141677460-	APR/19 HYDRO - RUTHVEN WATER TREATMENT PLANT				245	09-May-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				51,072.50
200141680692-	APR/19 HYDRO - LOW LIFT				245	09-May-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-4.30
70-5-0700-7420	002073			Electricity				27,771.49
200141680894-	APR/19 HYDRO - LEAMINGTON WATER TOWER				245	30-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-31.76
70-5-0700-7420	002073			Electricity				448.73
200141681706-	APR/19 HYDRO - METER#2				245	29-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-3.11
70-5-0700-7420	002073			Electricity				43.96
200141682009-	APR/19 HYDRO - ALBUNA WATER TOWER				245	30-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-109.10
70-5-0700-7420	002073			Electricity				1,540.96
200141683019-	APR/19 HYDRO - METER#3				245	30-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-2.84
70-5-0700-7420	002073			Electricity				40.16
200141683120-	APR/19 HYDRO - METER#5				245	30-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-2.84
70-5-0700-7420	002073			Electricity				40.14
200141683423-	APR/19 HYDRO - METER#6				245	30-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-2.78
70-5-0700-7420	002073			Electricity				39.26
200141683524-	APR/19 HYDRO - METER#8				245	29-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-4.62
70-5-0700-7420	002073			Electricity				65.24
200141687362-	APR/19 HYDRO - METER#22				245	29-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-2.63
70-5-0700-7420	002073			Electricity				37.19
200141687766-	APR/19 HYDRO - METER#29				245	29-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-2.84
70-5-0700-7420	002073			Electricity				40.12
200141687867-	APR/19 HYDRO - METER#24				245	29-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-2.28
70-5-0700-7420	002073			Electricity				32.15
200141690190-	APR/19 HYDRO - METER#26				245	26-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-4.05
70-5-0700-7420	002073			Electricity				57.17
200152134969-	APR/19 HYDRO - METER#17				245	09-May-2019	16-May-2019	
70-5-0700-7420	002073			Electricity				-2.62
70-5-0700-7420	002073			Electricity				36.96
150365 ONTARIO CLEAN WATER AGENCY								
INV000112576	APR/19 OPER&MTCE				245	30-Apr-2019	16-May-2019	
70-5-0700-6720	002071			OCWA Operating Contract				241,376.00
160530 PRICEWATERHOUSE COOPERS LLP								
TR139140717	RESTRUCTURING CONSULTANT-FINANCIAL				245	08-May-2019	16-May-2019	
70-5-0700-7950	002070			Professional Services				4,250.65
190185 SGS CANADA INC. ENVIRONMENTAL SERVICES								
11237164	WATER QUALITY STUDIES CORROSION-KINGSVILLE				245	29-Apr-2019	16-May-2019	
70-5-0700-7989	002075			Operational Programs & Studies				98.31



Vendor : 0011450 To PT00000165
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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								
11237173	WATER QUALITY STUDIES CORROSION-LAKESHORE					245	29-Apr-2019	16-May-2019	
70-5-0700-7989	002075			Operational Programs & Studies					98.31
11237175	WATER QUALITY STUDIES CORROSION-UWSS					245	29-Apr-2019	16-May-2019	
70-5-0700-7989	002075			Operational Programs & Studies					621.50
11237177	WATER QUALITY STUDIES CORROSION-LEAMINGTON					245	29-Apr-2019	16-May-2019	
70-5-0700-7989	002075			Operational Programs & Studies					98.31
11237188	WATER QUALITY STUDIES CORROSION-ESSEX					245	29-Apr-2019	16-May-2019	
70-5-0700-7420	002073			Electricity					98.31
190755	SUN LIFE ASSURANCE COMPANY OF CANADA								
MAY-19	MAY/19 UNION WATER LOAN 3724:1					245	01-May-2019	16-May-2019	
70-5-0700-6000	002020	006901		Debenture Principal					98,514.53
70-5-0700-6100	002010	006901		Debenture Interest					111,392.47
190990	SYNTEC PROCESS EQUIPMENT								
0097051-IN	VALVE - CLARIFIER #1					245	02-May-2019	16-May-2019	
70-7-0700-8720	700001			Clarifiers					11,927.15
210120	UNION GAS LTD								
1929770177678	459.632M3 GAS - COTTAM BOOSTER STATION					245	10-May-2019	16-May-2019	
70-5-0700-7410	002073			Gas					139.39
Department Totals :									549,705.19



Vendor : 0011450 To PT00000167
 Batch : All
 Department : All

Cheque Print Date : 30-May-2019 To 31-May-2019
 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						
DEPARTMENT 0700 Union Water System							
010103 ASSOCIATED ENGINEERING (ONT) LTD							
525743	SCADA UPGRADES - MAY10				278 22-May-2019	30-May-2019	
70-7-0700-8780				SCADA System			3,046.59
525744	SCADA - PROCESS NARRATIVE				278 22-May-2019	30-May-2019	
70-7-0700-8780				SCADA System			22,931.65
525746	CO2 WATER PH ADJUSTMENT				278 22-May-2019	30-May-2019	
70-7-0700-8745	700200			Treatment Plant			22,947.69
080143 HICKS MACPHERSON							
8925	2018 UWSS AUDIT FEES				267 03-May-2019	30-May-2019	
70-5-0700-7959	002070			UWSS Audit Fees			6,700.90
210124 UNION WATER SUPPLY SYSTEM - PETTY CASH							
MAY28-19	BUSINESS LUNCH/MEETING				278 28-May-2019	30-May-2019	
70-5-0700-7052	002070			Meeting Expenses			28.86
70-5-0700-7052	002070			Meeting Expenses			59.13
230420 WILL INSURANCE BROKERS LTD							
0681610	POLICY RENEWAL				278 10-May-2019	30-May-2019	
70-5-0700-7140	002070			Insurance - Liability			7,784.10
230440 WILLIS BUSINESS LAW							
10466	LEGAL FEES - RESTRUCTURING				278 30-Apr-2019	30-May-2019	
70-5-0700-7950	002070			Professional Services			2,878.74
Department Totals :							66,377.66



Vendor : 0011450 To PT00000167
 Batch : All
 Department : All

EFT Paid Date : 30-May-2019 To 31-May-2019
 Bank : 07 To 08
 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							
080250		HYDRO ONE NETWORKS INC							
200141683726-I	MAY/19	HYDRO - METER#15			277	27-May-2019	30-May-2019		
70-5-0700-7420		002073		Electricity				-2.52	
70-5-0700-7420		002073		Electricity				35.56	
200141690190-I	MAY/19	HYDRO - METER#26			277	27-May-2019	30-May-2019		
70-5-0700-7420		002073		Electricity				-3.78	
70-5-0700-7420		002073		Electricity				54.26	
200220161473-I	MAY/19	HYDRO - METER#14			277	23-May-2019	30-May-2019		
70-5-0700-7420		002073		Electricity				-2.41	
70-5-0700-7420		002073		Electricity				34.01	
130120		MAPLE REINDERS CONSTRUCTORS LTD							
24468 PC#1		PMT#1 CO2 INJECT/CL2 GAS SYSTEMS			282	30-Apr-2019	31-May-2019		
70-7-0700-8745		700200		Treatment Plant				29,798.10	
70-7-0700-8745		700200		Treatment Plant				3,310.90	
210120		UNION GAS LTD							
1929770208308	7847.827M3	GAS - RUTHVEN WATER TREATMENT PLANT			277	22-May-2019	30-May-2019		
70-5-0700-7410		002073		Gas				2,063.20	
1929770217397	412.300M3	GAS - LOW LIFT			277	24-May-2019	30-May-2019		
70-5-0700-7410		002073		Gas				127.71	
Department Totals :								35,415.03	