



**Drinking Water Quality Management System Review and
Level 3 Risk Assessment
October 5, 2021**

The following were in attendance:

Darlene Suddard, Councillor Gary Bruno, Councillor Harry Wells, Chris Kalimootoo, Tommy Peazel

Regrets:

Items	Actions/Deadline
1. Overview of purpose and outcomes of annual Management Review	
<p>Cassandra provided an overview of the Management Review, indicating that the main purpose is to provide Management with appropriate and sufficient data to make decisions regarding the Quality Management System.</p> <p>This Management Review covered the period from January 1 2020 to August 31, 2021.</p>	
2. Level 3 Risk Assessment	
<p>RA outcomes from level 1 RA were reviewed and hazards were reviewed. Previous items were discussed and those risks/hazards will be evaluated during the 2022 RA.</p> <ul style="list-style-type: none"> • Staff discussed the current trend of chlorine residual and the impact the WTP has on the distribution system • The COVID pandemic and staffing shortages was also discussed. An SOP should be considered to address future pandemics or other staff disruptions • An SOP to describe how staff designate alternative staff members for vacation or other absences of over 48 hours was considered. 	
ACTION: 1. Consider adding SOPs as outlined above.	Cassandra, Q2 2022
3. Management Review - Items to be discussed.	

Items	Actions/Deadline
Attendees were provided with a summary of the items required to be discussed, as specified by the DWQMS, prior to the meeting date.	
<p><i>a) Incidents of Regulatory Non-Compliance</i></p> <p>None reported.</p>	
<p><i>b) Incidents of Adverse Drinking Water Tests</i></p> <p>Overview was provided at the meeting.</p>	
<p><i>c) Deviations from critical control point limits and response actions</i></p> <p>Overview was provided. No concerns.</p>	
<p><i>d) 2020 Risk Assessment</i></p> <p>Last year's Risk Assessment was discussed. Previous year action items were discussed as item 2. Level 3 Risk Assessment</p>	
<i>e) Results of Internal and Third Party Audits</i>	
<p>Internal</p> <p>-question regarding whether the past audits identified staffing shortages as an opportunity for improvement. It was described that the increase length of vacancies is more recent. Concerns raised if loss of staff occurred, then this would result in loss of knowledge and ultimately could impact water loss since staff are not able to take proactive approach to water loss issues (leak detection, record keeping, increase in field knowledge).</p> <p>-In 2022 we need to evaluate how we should be estimating water loss. Water main break water loss can be very challenging to estimate. Best approach would be to take proactive leak detection approach. Even new infrastructure poses challenges due to the rock that Port Colborne has.</p> <p>ACTION: 1. Water loss calculations and assumptions need to be firmed up.</p>	Darlene, Q1 2022
<p>External</p> <p>-no concerns raised.</p>	
<p><i>f) Results of relevant emergency response testing</i></p> <p>-discussed potential topics for 2022 emergency response testing, such as terrorism or the actual emergency that was the COVID pandemic and our response.</p>	

Items	Actions/Deadline
<p><i>g) Operational Performance</i></p> <ul style="list-style-type: none"> - Discussion around Table 2 in the Summary Report and refining the Operational Performance Indicators and making sure these items are better tracked moving forward. - Discussion around Figure 3 and how the water purchased and the metered volumes are continuously getting closer and following the same trend. - 2020 monitoring of unbilled water wasn't as closely tracked due to challenges around staffing and making assumptions on water loss. Water loss calculations are estimates and can pose challenges with accuracy. Moving into 2022 water loss calculations and assumption will be better defined. <p>ACTION: 1. Operation Performance Indicators need to be set and tracked for long term tracking.</p>	Tommy, Q4 2021
<p><i>h) Raw Water Supply and Water Quality Trends</i></p> <p>Discussion around lowered chlorine residuals from the WTP starting in Spring 2021 and the impact it appears to be having on the distribution system. Discussions with Region are ongoing. Flushing programs are being better optimized as well.</p>	
<p><i>i) Follow up on action items from previous management reviews</i></p>	
<p>Action Items:</p> <ul style="list-style-type: none"> ■ Sampling SOP - It was asked if the City's sampling procedure included instructions on how to check the sample bottle to ensure it was "good" before using it to collect a sample. Staff indicated they would check the procedure and incorporate if the procedure didn't contain that information <ul style="list-style-type: none"> ○ STATUS: Procedure revision is in progress and is high priority 	
<ul style="list-style-type: none"> ■ Reagent storage/disposal – It was discussed that a process for reagent storage/disposal will be created to ensure expired standards and reagents won't be used during watermain commissioning, and it was suggested that there may be an opportunity to set up automatic notifications regarding expiry dates. <ul style="list-style-type: none"> ○ STATUS: Procedure finalization in progress 	

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<ul style="list-style-type: none"> ▪ Region communication in event of shutdown of Region facility – outcome of the 2017 mock emergency. The City was concerned that the Region does not notify the City of all outages/upsets at Region facilities. While it is true that the majority of system outages/upsets at Regional facilities will have little to no impact on the City's distribution system, knowing the status of the Regional facilities in the event of a distribution system incident and/or emergency would only assist the City and the Region in providing the highest quality drinking water and customer service to our residents – as drinking water is shared responsibility. Director was to discuss with Region's leadership team <ul style="list-style-type: none"> ○ STATUS: Region doesn't always notify us or communicate to use when the plan is down. Director level discussion needs to happen. Darlene to forward information to Chris. 	Darlene/Chris, Q1 2022
<ul style="list-style-type: none"> ▪ Frozen Water Services Hotline – repurposing as a hotline where residents could call to listen to a recorded message and receive information during a water emergency – number would be provided in all advisories and communications. Monitoring evolution of the customer service position(s) to determine if hotline is still required. <ul style="list-style-type: none"> ○ STATUS: this is discontinued. However, Customer Service representatives should have access to FAQs on the intranet to better understand the issue and answer resident questions. Cassandra to reach out to Jonathan and prepare some FAQs 	Cassandra, Q4 2021
<ul style="list-style-type: none"> ▪ Alternative “local” chemical laboratories - There are no local chemical labs approved by the Ministry for drinking water analyses. The Region has an agreement with a laboratory in Waterloo, and has a key and code to access the laboratory in order to drop off samples 24/7, and they have pricing for 24/7 analysis in the event of an emergency. Investigate more alternative laboratories for the City and discuss emergency sampling with the current laboratories. <ul style="list-style-type: none"> ○ STATUS: We do have this service at our micro lab, but can reach out to other municipal colleagues to see if there's any interest to try and get better pricing, but then all of our “eggs are in one basket” as we'll all be purchasing from the same lab. Darlene to ask Chuck to look into Niagara co-op for purchasing. 	Darlene, Q4 2021
<ul style="list-style-type: none"> ▪ Leak detection on Region's trunk watermain – the Region does not do active leak detection on their trunk watermain, however, it has been indicated that there is an appetite to pursue program(s). <ul style="list-style-type: none"> ○ STATUS: Ongoing 	

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<ul style="list-style-type: none"> ▪ QMS Rep back up - there remains no defined back up to the QMS Representative and succession planning has not yet been discussed. It was asked if there was an opportunity for local municipalities to back each other up, as many of the smaller municipalities do not have a back up for their QMS Rep. <ul style="list-style-type: none"> ○ STATUS: Climate Change Coordinator fulltime FTE will act as backup. 	
<ul style="list-style-type: none"> ▪ Health Canada Lead Levels – Health Canada officially released updated guidelines for lead in drinking water in March, 2019 – lowering the acceptable concentration of lead in drinking water from 10 µg/L to 5µg/L. The Ministry will 	
<ul style="list-style-type: none"> ▪ likely also lower their limit (currently 10 µg/L), and may require those municipalities that are currently exempt from collecting and analyzing plumbing samples to commence sampling again. Port Colborne has been exempt from sampling plumbing (homes and businesses) since 2010. A review of historical plumbing sample results indicates there were two exceedances of the 10µg/L limit in 2008, and while there were not exceedances of the limit in 2009, there was one plumbing sample that was higher than the proposed 5µg/L limit. <ul style="list-style-type: none"> ○ STATUS: Staff will continue to monitor communications from the Ministry and inform Top Management as required. No changes have occurred yet. 	
<ul style="list-style-type: none"> ▪ Asset Management Planning Regulation – O. Reg. 588/17 came into force on January 1, 2018. <ul style="list-style-type: none"> ○ STATUS: Ongoing. Some overlap with the infrastructure review process. INS out for tender and this will feed into the capital plan. 	
<ul style="list-style-type: none"> ▪ QMS Standard Operating Procedures - Councillor Wells to investigate possible on-line method to access DWQMS SOPs that are referenced in the Operational Plan. Councillors don't have access to IBM Notes, so are unable to access the Quality Management System database, and the files are too large to email out. It was discussed if there was a secure online tool that the Councillors could access to view the procedures. <ul style="list-style-type: none"> ○ STATUS: Some discussion around adding some procedures to the intranet for ease of access, but this is still ongoing. 	

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<ul style="list-style-type: none"> ▪ It was discussed that when buildings are demolished, that the Utilities group needs to be kept in the loop to ensure that the water service and sewer lateral are correctly decommissioned to ensure the service is not leaking and that the sewer lateral is not allowing infiltration into the wastewater collection system. <ul style="list-style-type: none"> ○ STATUS: Still in progress 	
<ul style="list-style-type: none"> ▪ It was discussed that when buildings are demolished, that the Utilities group needs to be kept in the loop to ensure that the water service and sewer lateral are correctly decommissioned to ensure the service is not leaking and that the sewer lateral is not allowing infiltration into the wastewater collection system. <ul style="list-style-type: none"> ○ STATUS: Still in progress ▪ Engineering is working on a procedure for Planning and Building Department tasks and will incorporate. <ul style="list-style-type: none"> ○ STATUS: Action item. ▪ It was discussed whether it would be feasible to go back through all demolitions in the last five years to ensure that the services were properly decommissioned. <ul style="list-style-type: none"> ○ STATUS: These 3 items are all related. PW needs to decide on how long water services should be kept after demolitions. IF the land is staying vacant then they should be decommissioned and the contractor should be required to reconnect new services, but we inspect. Growth will pay for growth and is being reflected in new fees and charges bylaw. Brian Kostuk needs to know the process for building and M.C permits perspective. ○ Review previous demo permits to find status on services 	Tommy, Q4 2021
<p>j) <i>Status of management action items identified between reviews</i></p> <p>None.</p>	
<p>k) <i>Changes that could affect the QMS or the PCDS</i></p> <p>Sanitary and Storm CLI-ECAs: Due January 2022. While this falls outside the scope of DWQMS, it will take significant staff resources to comply with the new ECA requirements and could impact staffing and other resources.</p>	
<p>l) <i>Consumer Feedback</i></p> <p>-most related to taste and were resolved once Operator was there and testing came back within acceptable parameters.</p>	
<p>m) <i>Resources Needed to maintain the QMS</i></p> <p>- <i>Related to new CLI-ECA and pressure on staffing</i></p>	
<p>n) <i>Results of Infrastructure Review</i></p> <p>-Next one will be complete in December 2021</p>	
<p>o) <i>Operational Plan Currency, Content and Updates</i></p>	

Items	Actions/Deadline
-revision coming to Council end of October.	
p) Staff suggestions None at this time.	
4. Round Table	
Chris- financial plan does include increase to staffing by 1 FTE in 2022 and to have a temporary staff as an OIT to try and develop internally and for succession planning and staff development. Councilor Wells- graphs are really important tool for reviewing the water purchased amounts versus billed water. Also discussion on if there is a need for more staff to build a business case to show the justification.	
5. Next Scheduled Review The Next Management Review will be scheduled for September 2022	