

# APPENDIX "K"



## QMS Meeting

Date: May 13, 2016  
 Location: Water Operations Admin Boardroom  
 Time: 12:45 pm to 1:30 pm  
 Meeting Type: QMS Management Review  
 File: A-02 Staff Committees & Meetings

### WATER OPERATIONS BRANCH

Facilitator: Jennifer Barrick (JB)

Attendees: Chris Marchant (CM), Edgar Tovilla (ET), Amanda Inglis (AIP), Michael Munshaw (MM), Len Anderson (LA), Chris Harper (CH), Jeanette Dumais (JD) arrived at 1:00 pm, David Truax (DT) arrived at 1:00 pm, John F Thompson (JFT) arrived at 1:05 pm as an observer and left at 1:20 pm.

Recording: Mark Vandergeest (MV)

Absent: Diane Moreau (DM), Jamey Adams (JA)

| Agenda Item  | Discussion/Decision   |
|--|---|
| <p><b>Incidents of Adverse Drinking Water</b></p>                                | <p><b><u>Summary of Incidents of Adverse Drinking Water Tests</u></b></p> <ul style="list-style-type: none"> <li>- All Sections within the Water Operations Branch that reported an AWQI completed a F20-04, Summary of Adverse Water Quality Incidents.</li> <li>- DT completed the F20-08 Management Review Summarization Form for Adverse Water Quality for the GWS Section.</li> <li>- JB commented that one AWQI was reported by GWS at Well 13 in the for the 1<sup>st</sup> quarter of 2016</li> <li>- ET inquired as to what a chlorine regulator was and what its purpose was.</li> <li>- LA in DT's absence explained what and how a chlorine regulator is and why it's used in the drinking water system.</li> <li>- CH completed the F20-08 Management Review Summarization Form for Adverse Water Quality for the WDS Section.</li> <li>- JB commented that one potential AWQI was reported by WDS at V6880 Anne St N in the for the 1<sup>st</sup> quarter of 2016</li> </ul> |
| <p><b>Deviations from Critical Control Point Limits and Response Actions</b></p> | <p><b><u>Deviations from SCADA Minimum Set Points</u></b></p> <ul style="list-style-type: none"> <li>- MV discussed that reports have not been completed by Eramosa due to procurement issues for the GWS section.</li> <li>- MV further discussed that the QMS Management Team discussed in 2015 it would use AWQI's as deviations. The only deviations from SCADA Minimum Set Points would be the AWQI's reported from the GWS and SWS sections until the procurement issues are resolved.</li> <li>- The total number of deviations is 1 for the 1<sup>st</sup> quarter of 2016 year.</li> </ul>   |

**\*\* Refer to QMS Action Log for specific details regarding action items assigned during QMS Meetings**



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### WATER OPERATIONS BRANCH

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Recording: Mark Vandergeest (MV)

Absent: Diane Moreau (DM), Jamey Adams (JA)

| Agenda Item                           | Discussion/Decision   |
|---------------------------------------|---|
|                                       | <p><b><u>Distribution Operational Limits Deviation Summary.</u></b></p> <ul style="list-style-type: none"> <li>- CM presented the completed F20-08 Management Review Summarization Form for Distribution Operational Limits Summary for the WCS Section.</li> <li>- CM discussed that there were 187 flushing activities that occurred in the 1<sup>st</sup> quarter of 2016.</li> <li>- CM discussed the following:               <ul style="list-style-type: none"> <li>- <b>Turbidity</b> – during the 1<sup>st</sup> quarter of 2016, there were 69 occurrences where the initial reading was greater than 2 NTU.</li> <li>- <b>Chlorine Residual</b> during the 1<sup>st</sup> quarter of 2016, there were 0 occurrences where the low chlorine events was under .2ppm</li> <li>- <b>Flushed Volumes</b> – during the 1<sup>st</sup> quarter of 2016, there were 43 occurrences where flushing volumes exceeded 100 m3 events</li> </ul> </li> </ul> |
| <p><b>Operational Performance</b></p> | <p><b><u>Flow Summary Reports</u></b></p> <ul style="list-style-type: none"> <li>- JB presented the GWS completed F20-08 Management Review Summarization Form on Flow Summaries.</li> <li>- JB discussed that all water taken was within prescribed limits of the Permit to Take Water.</li> <li>- JB further discussed that there were a number of wells that were down for maintenance activities.</li> <li>- JB presented raw data on flow summaries for the SWS section.</li> <li>- JA did not provide a completed F20-08 Management Review Summarization Form for Flow Summaries Reports for the SWS section. This item has been added to the QMS Action Log, identified as item #16-026 assigned to JA with a target date of June 8, 2016.</li> <li>- CM commented that based on the data provided, production from our sources appears to be down from previous years.</li> </ul>  |

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## QMS Meeting

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File: A-02 Staff Committees & Meetings

### WATER OPERATIONS BRANCH

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Recording: Mark Vandergeest (MV)

Absent: Diane Moreau (DM), Jamey Adams (JA)

| Agenda Item | Discussion/Decision   |
|-------------|---|
|             | <p><b><u>Operational Performance</u></b></p> <ul style="list-style-type: none"> <li>- GWS, WCS, WDS and SWS completed the F20-07 Summary of Operational Performance.</li> <li>- CM presented the WCS completed F20-08 Management Review Summarization Form on Operational Performance.</li> <li>- JB presented the WDS completed F20-08 Management Review Summarization Form on Operational Performance.</li> <li>- JB presented the GWS completed F20-08 Management Review Summarization Form on Operational Performance.</li> <li>- JB presented raw data on Operational Performance for the SWS section.</li> <li>- JA did not provide a completed F20-08 Management Review Summarization Form for Operational Performance for the SWS section. This item has been added to the QMS Action Log, identified as item #16-027, assigned to JA with a target date of June 8, 2016.</li> <li>- MM commented that for the GWS F20-08's there was not any specific information on what fell into the different work order categorizations.</li> <li>- DT discussed that in his section, communication failures, SCADA failures and emergency call outs, fall into the emergency category.</li> <li>- MM inquired as to why there were 4 emergency work orders still open in WDS.</li> <li>- CH discussed that he did not know the specifics of those work orders.</li> </ul> <p><b><u>Watermain Break Report Summary</u></b></p> <ul style="list-style-type: none"> <li>- JB discussed that WDS completed F20-08 Management Review Summarization Form for Main Break Report Summary.</li> <li>- JB described that WDS had 12 water main breaks in the 1<sup>st</sup> quarter of 2016.</li> <li>- JB discussed that in the same quarter in 2015 year there was 17 watermain breaks.</li> </ul> |

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### WATER OPERATIONS BRANCH

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Recording: Mark Vandergeest (MV)

Absent: Diane Moreau (DM), Jamey Adams (JA)

| Agenda Item | Discussion/Decision |
|-------------|---------------------|
|-------------|---------------------|

|  |  |
|--|--|
| <p><b>Raw Water Supply and Drinking Water Quality Trends</b></p> | <p><b><u>VOC Trending</u></b></p> <ul style="list-style-type: none"> <li>- JB presented the completed F20-08 Management Review Summarization Form for VOC Trending.</li> </ul> <p><b><u>Sodium Trending</u></b></p> <ul style="list-style-type: none"> <li>- JB presented the completed F20-08 Management Review Summarization Form for Sodium Trending.</li> <li>- JFT inquired if we had reported an AWQI, recently for sodium.</li> <li>- JB discussed that one would be reported for the next treated water sodium sample taken.</li> </ul> <p><b><u>SWS Water Quality Sampling</u></b></p> <ul style="list-style-type: none"> <li>- JB presented the completed F20-08 Management Review Summarization Form for SWS Water Quality Sampling.</li> <li>- JB discussed that there were one set of Nitrate/Nitrite, one THM reservoir sample and 13 sets of microbiological samples collected.</li> <li>- JB further discussed that there were 13 set of non-regulatory microbiological sampled collected from the process area.</li> </ul> <p><b><u>GWS Water Quality Sampling</u></b></p> <ul style="list-style-type: none"> <li>- JB presented the completed F20-08 Management Review Summarization Form for regulatory GWS sampling.</li> <li>- JB discussed the following;             <ul style="list-style-type: none"> <li>o One (1) set of nitrate/nitrite samples were collected and tested for the groundwater wells. (Were not collected from WPS 3A &amp; WPS 15)</li> <li>o One (1) set of Schedule 23/24 samples were collected from Well 12</li> <li>o Three (3) sets of VOC samples were collected from Wells 3A, 5, 11 and 14 to fulfill their monthly sample requirements as per the City of Barrie's MDWL. (Samples were not collected for Well 15 in the month of March)</li> <li>o One (1) set of sodium samples, each from Wells 3A, 9, 11, 12, 13 and 14 to fulfill their quarterly sample requirements as per the City of Barrie's MDWL.</li> </ul> </li> </ul> |
|--|--|

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Attendees: Chris Marchant (CM), Edgar Tovilla (ET), Amanda Inglis (AIP), Michael Munshaw (MM), Len Anderson (LA), Chris Harper (CH), Jeanette Dumais (JD) arrived at 1:00 pm, David Truax (DT) arrived at 1:00 pm, John F Thompson (JFT) arrived at 1:05 pm as an observer and left at 1:20 pm.

Recording: Mark Vandergeest (MV)

Absent: Diane Moreau (DM), Jamey Adams (JA)

| Agenda Item                                | Discussion/Decision   |
|--|---|
|  | <ul style="list-style-type: none"> <li>○ 215 (total) raw and treated microbiological samples were collected and tested for the groundwater wells.</li> </ul> <p><b><u>SWS In-house Lab Results</u></b></p> <ul style="list-style-type: none"> <li>- JD presented raw data on SWS In-house Lab Results for the SWS section.</li> <li>- JA did not provide a completed F20-08 Management Review Summarization Form for SWS In-house Lab Results for the SWS section. This item has been added to the QMS Action Log, identified as item #16-028, assigned to JA with a target date of June 8, 2016.</li> <li>- CM inquired about one of the alkalinity results that looked out of place, compared to the other data.</li> <li>- JD and LA discussed that it was not explainable.</li> <li>- CM further commented that since January, the in-house lab data looked more consistent when plotted compared to previous years.</li> </ul> <p><b><u>Drinking Water Quality Trends in the WD System</u></b></p> <ul style="list-style-type: none"> <li>- JB presented the raw data on Drinking Water Quality Trends in the WD System.</li> <li>- DT did not provide a completed F20-08 Management Review Summarization Form for Drinking Water Quality Trends in the WD System for the GWS section. This item has been added to the QMS Action Log, identified as item #16-029, assigned to DT with a target date of June 8, 2016.</li> </ul> |
| <p><b>Summary of Consumer Feedback</b></p> | <p><b><u>Summary of Consumer Feedback</u></b></p> <ul style="list-style-type: none"> <li>- CM presented the completed F20-08 Management Review Summarization Form for Summary of Consumer Complaints and provided a CityWorks report for customer complaints</li> <li>- CM discussed that there was 102 total complaints that were received in the 1<sup>st</sup> quarter of 2016.</li> <li>- CM noted that for the same period of 2015 year there were 289 total water quality complaints received.</li> </ul>   |

**Next Meeting: July 27, 2016**

**\*\* Refer to QMS Action Log for specific details regarding action items assigned during QMS Meetings**



## QMS Meeting

**Date:** 2016-08-19  
**Location:** Water Operations Admin Boardroom  
**Time:** 1:30 pm to 3:00 pm  
**Meeting Type:** QMS Management Review  
**File:** A-02 Staff Committees & Meetings

### WATER OPERATIONS BRANCH

**Facilitator:** Amanda Inglis-Petahegoose (AIP)  
**Attendees:** Chris Marchant (CM) Diane Moreau (DM) David Truax (DT) Jamey Adams (JA) Jennifer Barrick (JB) Mark Vandergeest (MV)  
**Recording:** Michael Munshaw (MM)  
**Absent:** Chris Harper (CH) Jeanette Dumais (JD)

| Agenda Item   | Discussion/Decision  |
|---|--|
| C- Incidents of Drinking Water Tests                                  | <p>DT - commented on Adverse Water Quality Incidents (AWQI) encountered during the second quarter, the majority of AWQI were in relation to start-up sequence issues, one incident was attributed to a defective PLC (well 11), completed F20-08 provided.</p> <p>MV - commented that all AWQI had been put through the Continual Improvement Process (CIP).</p> <p>DM - enquired if there were any additional tools that could be put in place to limit the number of incidents reported as precautionary AWQI as it creates a significant amount of subsequent work for CTS Staff</p>  |
| D- Deviations from Critical Control Point Limits and Response Actions | <p><u>SWS Deviations</u></p> <p>JA - commented that no deviations (AWQI) were reported during the second quarter from SWS, completed F20-08 provided.</p> <p><u>GWS Deviations</u></p> <p>DT - commented on the deviations (AWQI) reported in agenda item C- incidents of Drinking Water Tests, completed F20-08 provided.</p> <p>MV - reminded the team that for both SWS and GWS the issues with Eramosa completing work were still present and until resolved there was no ability to extract all deviations from SCADA logged information. In the interim, Management had previously agreed to solely report AWQIs as deviations.as deviation.</p> <p><u>WDS Deviations (flow, secondary residuals, turbidity)</u></p> <p>CM - commented on visuals, F20-08 outstanding. Action item created to provide required F20-08, 16-087 assigned to CH target date 2016-09-14.</p> |
| G- Operational Performance  | <p><u>Ground Water Supply Flow Performance</u></p> <p>DT - commented on production trends noting an increase this quarter over the previous year's quarter production. F20-08 provided.</p> <p>CM - added that there was an increase in flushing activities this year which may account for some of the additional production, the exceptionally dry summer being the other likely reason.</p>   |

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## QMS Meeting

Date: 2016-08-19

Location: Water Operations Admin Boardroom

Time: 1:30 pm to 3:00 pm

Meeting Type: QMS Management Review

File: A-02 Staff Committees & Meetings

### WATER OPERATIONS BRANCH

Facilitator: Amanda Inglis-Petahegoose (AIP)

Attendees: Chris Marchant (CM) Diane Moreau (DM) David Truax (DT) Jamey Adams (JA) Jennifer Barrick (JB) Mark Vandergeest (MV)

Recording: Michael Munshaw (MM)

Absent: Chris Harper (CH) Jeanette Dumais (JD)

| Agenda Item   | Discussion/Decision  |
|---|--|
|   | <p><u>Surface Water Supply Flow Performance</u><br/>           JA - commented on production trends noting a slight increase this quarter over the previous year's quarter production. F20-08 provided.<br/>           JA - commented that raw and treated production was still well below 50% from a max day perspective.</p> <p><u>Water Customer Services Operational Performance</u><br/>           CM - commented that flushing volumes were five time greater than those reported in the previous quarter and that there were outstanding WOs due to batch printing and delays in obtaining access to certain properties. F20-08 provided.</p> <p><u>Water Distributions Services Operational Performance</u><br/>           CH - no comment as CH was absent. F20-08 outstanding. Action item created to provide required F20-08, 16-088 assigned to CH target date 2016-09-14<br/>           CM - commented on watermain break report summary graph, questioning correlation between break type and material.<br/>           MV - commented that the 'other' comment for watermain break type and cause should be examined to see if there is a more appropriate response that would provide better clarity as to the type and cause. To be discussed at the next Management Team meeting. Item added to agenda of meeting held Sept 14, 2016.</p> <p><u>Ground Water Supply Operational Performance</u><br/>           DT - commented on outstanding preventative maintenance due to batch printing, will be looking at options to prevent this from occurring in the future. F20-08 provided.</p> <p><u>Surface Water Supply Operational Performance</u><br/>           JA - all's well on the western front says Jamey. F20-08 provided.</p> <p><u>Compliance and Technical Support Operational Performance</u><br/>           DM - commented on new data set added to Management Review (backflow program status). F20-08 provided.</p> |
| H- Raw Water Supply and Drinking Water Quality Trends | <p><u>VOC Sampling Trends</u><br/>           DT - commented on general trend, no outstanding results</p>   |

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## QMS Meeting

Date: 2016-08-19

Location: Water Operations Admin Boardroom

Time: 1:30 pm to 3:00 pm

Meeting Type: QMS Management Review

File: A-02 Staff Committees & Meetings

### WATER OPERATIONS BRANCH

**Facilitator:** Amanda Inglis-Petahegoose (AIP)

**Attendees:** Chris Marchant (CM) Diane Moreau (DM) David Truax (DT) Jamey Adams (JA) Jennifer Barrick (JB) Mark Vandergeest (MV)

**Recording:** Michael Munshaw (MM)

**Absent:** Chris Harper (CH) Jeanette Dumais (JD)

| Agenda Item | Discussion/Decision |
|-------------|---------------------|
|-------------|---------------------|

|  |  |
|--|--|
|  | <p>DM - commented that there would need to be refinements such that the method detection limit was not portrayed as a value on the trends as there is no way to know for certain if the parameter was at this value or lower. Item added to next Maintenance Team meeting agenda 2016-09-07</p> <p><u>Sodium Sampling Trends</u><br/>DT - commented on general trend, noting Well 12 is showing the highest value. F20-08 provided.</p> <p><u>General Chemistry Sampling Trends</u><br/>No general Chemistry was collected in this quarter, item not applicable.</p> <p><u>SWS Quality Sampling Trends</u><br/>JA - commented that all sampling adequate, no outstanding issues. F20-08 outstanding. Action item created 16-089 assigned to JA target date of 2016-09-14.</p> <p><u>GWS Quality Sampling Trends</u><br/>DT - commented that all sampling adequate, no outstanding issues. F20-08 provided.</p> <p><u>SWS In-house Lab Sampling Trends</u><br/>JA - commented on trends, discussion with team about excluding historical data that appeared to be out of range with the current refined data (applies to Nitrogen and colour trend lines). Added to agenda for next Maintenance Team meeting to examine all trends and bring recommended course of action to Management Team.</p> <p><u>WDS Quality Sampling Trends</u><br/>AIP - reviewed THM trend, JA questioned what the course of action would be now that we had collected the requisite THM samples, team discussed; deciding that two samples representing both GWS and SWS would be collected<br/>DM - commented that both work orders and chain of custodies would require prompt revision to align with the next collection date, action item 16-090 assigned to MV with a target date of 2016-09-14 and action item 16-091 assigned to JB with a target date of 2016-09-14.</p> |
|--|--|

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## QMS Meeting

Date: 2016-08-19

Location: Water Operations Admin Boardroom

Time: 1:30 pm to 3:00 pm

Meeting Type: QMS Management Review

File: A-02 Staff Committees & Meetings

### WATER OPERATIONS BRANCH

**Facilitator:** Amanda Inglis-Petahegoose (AIP)

**Attendees:** Chris Marchant (CM) Diane Moreau (DM) David Truax (DT) Jamey Adams (JA) Jennifer Barrick (JB) Mark Vandergeest (MV)

**Recording:** Michael Munshaw (MM)

**Absent:** Chris Harper (CH) Jeanette Dumais (JD)

| Agenda Item                     | Discussion/Decision  |
|---------------------------------|--|
| L- Summary of Consumer Feedback | CM - commented on consumer feedback, no outstanding issues, F20-08 provided. |

**Next Meeting: 2016-10-26**

**\*\* Refer to QMS Action Log for specific details regarding action items assigned during QMS Meetings**

**QMS Meeting**

Date: 2016-11-24

Time: 8:30 am to 10:00 am

Meeting Type: QMS Q3 Management Review

File: <n:\igmlenvirolwater ops - cts\admin\la02-staff commit and mtgs\minutes - qms management team meetings\2016 management review meeting\2016-11-24 q3.docx>**Water Operations Branch**

Facilitator: Jeanette Dumais (JD)

Recording: Jeanette Dumais (JD)

Absent:

Attendees:

 Amanda Inglis-Petahtegoose (AIP) Diane Moreau (DM) Chris Marchant (CM) Jeanette Dumais (JD) Jennifer Barrick (JB) Mark Vandergeest (MV) Jamey Adams (JA) Michael Munshaw (MM) David Truax (DT) Chris Harper (CH)**Agenda**

1. Incidents of Adverse Drinking Water Tests
2. Deviations from Critical Control Limits and Response Actions
3. Operational Performance – System Production Values
4. Operational Performance – Sectional Work Orders
5. Operational Performance – Main Breaks
6. Raw Water Supply and Drinking Water Trends
7. Summary of Consumer Feedback

| Agenda Item  | Discussion/Decision   |
|--|---|
| 1. Incidents of Adverse Drinking Water Tests (slide 3 of 27)                         | JD – reviewed the 4 AWQI's recorded over the period<br>DM – AWQI #130966 is identified as the subject system on the chart as "distribution" therefore this was not recognized that DT (GWS) was to supply F20-08 response<br>JD – <b>Action item: 17-004:</b> make required change to chart to represent GWS not that the AWQI was received in the distribution sub-system and ensure the requisite F20-08 is received from DT  |
| 2. Deviations from Critical Control Point Limits and Response Actions (slides 5,6,7) | JD – reviewed with the group total number of activities, volumes over 100m <sup>3</sup> and zone specific flushing results for chlorine and turbidity<br>No comments were discussed from these graphs   |
| 3. Operational Performance – System Production Values (slides 9, 10, 11, 12, 13, 14) | JD – reviewed with the group graphs for Branch Production Trend in ML, Branch PTTW/MDWL Average Day, Production Trend in m <sup>3</sup><br>Collectively group commented on our increased production trend surpassing 2013, 2014 and 2015 values for the same period<br>JD – <b>Action Item: 17-005:</b> F20-08 not received from SWS entitled Operational Performance – Flow Summary for Q3   |
| 4. Operational Performance – Sectional Work Orders (slides 15, 16, 17, 18)           | JD – reviewed each section's work orders presented in chart form from the F20-07<br>DM – noted that there would no longer be a miscellaneous category in the future<br>MV – asked of the group if we should consider making some sort of KPI and suggested that 100% completion of the top three categories should be an achievable target<br>CM – questioned why there were 5 outstanding emergency work orders present on the chart<br>CH – <b>Action Item: 17-006:</b> investigate emergency work orders from the WDS section noted on the Q3 F20-07 that were not actioned before Q3 Management Review<br>DM – made the group aware that there still exists a time lag between activity completion and data entry<br>MM – suggested that the reports that are being emailed out could be done with greater frequency to ensure these anomalies are captured sooner<br>MV – suggested setting up the requisite inboxes for the Supervisory staff<br>CM – fully supports MVs suggestion<br>JA – suggests we look toward further training or looking into the available options at our disposal for dashboards as quick reference for Management<br>DM – made the group aware of an initiative to create Supervisor specific landing page dashboards<br>DM - asked that JD total the callouts so that we have a total number of callout events per quarter not just per station location<br>JD – <b>Action Item: 17-007:</b> add total callouts per station and per quarter to F20-07 for Q4 Management Review<br>JD – <b>Action Item: 17-008:</b> receive an F20-08 from SWS entitled Operational Performance – Work orders |
| 5. Operational Performance – Main Breaks (slide 19)                                  | JD – reviewed the graphs with the group<br>No comments were made to these graphs  |

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# QMS Meeting

Meeting Type: QMS Q3 Management Review  
Date: 2016-11-24



| Agenda Item                                   | Discussion/Decision   |
|---|---|
| 6. Raw Water Supply and Drinking Water Trends | <p>JD – reviewed the 5 year trend for sodium with the group<br/>           JA – believes at one time the MOECC objective was 100mg/L, please look into if this was in fact the case and when it changed<br/>           JD – immediately post meeting researched if ever there was a 100mg/L limit set but could not find any material to support JA’s inquiry<br/>           JD – reviewed the results for VOCs with the group<br/>           DM and CM – would like to see the stations with detects graphically represented as has been the standard in past Management Reviews<br/>           JD – <b>Action Item: 17-009:</b> update all VOC graphs and send out to Management staff via email<br/>           JD – reviewed the GWS Sampling with the group, no comments were received<br/>           JD – reviewed the SWS sampling with the group<br/>           JA – noted that it was not clear what sampling was still to be performed by the in-house lab and which was not<br/>           JD – <b>Action Item: 17-009:</b> clarify this slide and the associated F20-08 entitled Raw Water Supply and Drinking Water Trends – SWS Sampling with respect to in-house sampling (last paragraph)<br/>           JD – reviewed in-house lab sampling with the group using a live demonstration of eRIS for raw and treated: pH, temp., hardness, alkalinity, colour, nitrogen.<br/>           General comments from the group were very positive regarding the queries that were displayed.<br/>           DM and JA – did comment that it would be helpful to see laymen’s terms on the graphical representation of queries and or reports<br/>           DM – would like to see a column added to the lab data entry sheet with a range of acceptable values for each parameter<br/>           JD – <b>Action Item: 17-010:</b> send an email to Marco Leon requesting additional column added to in-house lab data entry sheet with range of acceptable values for each parameter<br/>           JD – reviewed with the group the THM sampling with the addition of the extra sampling that was performed using the RAA calculator<br/>           DM – advised that JD please use correct rounding when presented the final RAA numbers<br/>           JD – fix slide and corresponding F20-08 (this was completed immediately after the meeting)</p> |
| 7. Summary of Consumer Feedback               | <p>JD – reviewed with the group the graph representing the summary of customer complaints<br/>           CM – commented that most of flushing activities were directly represented as coloured concerns on the associated graph and this is in relation to the event that occurred at the Yonge/Little area of the city the first week of August<br/>           CM – would like to see a total included on the completed pie graph</p>  |

| Minutes Reviewed By  |
|--|
| <input checked="" type="checkbox"/> Amanda Inglis-Petahtegoose (AIP)<br><input type="checkbox"/> Diane Moreau (DM)<br><input type="checkbox"/> Jeanette Dumais (JD)<br><input checked="" type="checkbox"/> Jennifer Barrick (JB)<br><input checked="" type="checkbox"/> Mark Vandergeest (MV)<br><input type="checkbox"/> Michael Munshaw (MM)<br>Chris Marchant (CM)<br>Jamey Adams (JA)<br>David Truax (DT)<br>Chris Harper (CH) |

**Next Meeting: 2017-01-18**

**\*\* Refer to QMS Action Log for specific details regarding action items assigned during QMS Meetings**

**QMS Meeting**

Date: 2017-01-18

Time: 08:30 to 11:00

Meeting Type: QMS Q4 Management Review

File: <n:\igmlenvirolwater ops - cts\admin\la02-staff commit and mtgs\minutes - qms management team meetings\2016 management review meeting\2017-01-18 q4.docx>**Water Operations Branch**

Facilitator: Jeanette Dumais (JD)

Recording: Jeanette Dumais (JD)

Absent:

Mark Vandergeest

Attendees:

 Amanda Inglis-Petahtegoose (AIP) Diane Moreau (DM) Jamey Adams Jennifer Barrick (JB) Dave Truax Michael Munshaw (MM) Chris Harper (CH) Chris Marchant**Agenda**

1.

| Agenda Item   | Discussion/Decision  |
|---|--|
| 1. Incidents of Adverse Drinking Water Tests  | <p>JD – reviewed the Table 8 – Schedule 16 and 17, F20-08 signed and received<br/>           CM – would like to see the address from the AWQI of Kempview Lane added to the Location column<br/>           JA – please add parameter and result as zero as well as clear results received</p> <p><b>Action Item: 17-011: Add Kempview Lane address to Table 9 – Schedule 16-17 as well as verbiage regarding zero results from sampling – assigned to JD with a due date of Jan.31/17</b></p>  |
| 2. Deviations from Critical Control Point Limits and Response Actions - Flushing                        | <p>JD – reviewed flushing graphs with the group: total # of flushing activities, volumes flushed over 100m3, flushing activities per zone, F20-08 signed and received</p> <p>No comments from the group</p>  |
| 3. Deviations from Critical Control Point Limits and Response Actions – Deviation from SCADA Set Points | <p>JD – reviewed results of the F20-02 from the Surface Water Supply Group, F20-08 signed and received<br/>           JA – reiterated that there were no exceedances pointing toward an AWQI<br/>           JA – spoke to the alarms and events page of SCADA and how working on analytics with Eramosa will highlight nuisance alarms</p> <p>JD – provided an update to the group on the progress that is being made on the Groundwater side with a look at the new exceedances report provided to us from Eramosa. Errors were identified and highlighted by the group that are being actioned through our continued partnership with them. Further work to be done to satisfy an accurate number form this report</p> |
| 4. Operational Performance – System Production  | <p>JD – reviewed branch wide production graphs with the group including Max day and average day graphs, no F20-08 was distributed as these values are verified monthly by their inclusion in the Monthly Operations Report sent to Management and Owner Rep.<br/>           JA – would like to see a graphs in a more holistic view, grouping all sources together to produce max day of the system and average day of the system</p> <p><b>Action Item: 17-012: Create graphs that display the max. day and average day of the entire system – assigned to MM with a due date of Jan.31/17</b></p>  |
| 5. Operational Performance – GWS Production   | <p>JD – reviewed the production trend graphs with the group highlighting the entire year and the quarter, F20-08 was signed and received</p> <p>No comments from the group</p>   |

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| 6. Operational Performance – SWS Production             | <p>JD – reviewed the production trend graphs with the group, same as above, F20-08 was signed and received<br/>           JA – noted that the production for the month of November was noticeably reduced in the GWS system and noticeably increased in the SWS system graph<br/>           CH – commented that work was done Eaglestone PRV however we need to look into the PRV that controls flow through Zone 2 South and Zone 1<br/>           DT – commented that all PRVs were checked and work orders received did not identify an issue that he is aware of<br/>           DM – commented on running a CityWorks report to verify</p> <p><b>Action Item: 17-013: run CityWorks report on PRV maintenance to identify any that may be stuck in an open or close position – assigned to DM with a due date of February 13, 2017</b></p>  |
| 7. Operational Performance – Work Orders                | <p>JD – reviewed the F20-07 results of all sectional work orders with the group, F20-08's signed and received from CTS, GWS, SWS, WDS, outstanding from WCS<br/>           CM – commented on the large number of outstanding work orders as part of a larger project being conducted to rectify contractor installations (decimal issues)<br/>           DM – commented on reconsideration of categorization as no regulatory or emergency work orders should be appearing here during review</p> <p><b>Action Item: 17-014: re-categorization of work activities in question that have appeared in regulatory and emergency categories on the F20-07 in Management Review – assigned to DM with a due date of April 19, 2017</b></p>   |
| 8. Operational Performance – Call Outs                  | <p>JD – reviewed call outs section of the F20-07 for both SWS and GWS, F20-08s signed and received for both<br/>           DM – suggested that we consider dividing out the process areas for the plant<br/>           JA – commented that this will be satisfied through alarm analytics, would like to see another graph type of represent this information</p> <p><b>Action Item: 17-015: work on different graphs types to better represent the Operational Performance – Call-outs data for Management Review – assigned to JD with a due date of April 5, 2017</b></p>  |
| 9. Operational Performance – Main Breaks                | <p>JD – reviewed with the group: main breaks by material, size, nature and cause, F20-08 signed and received</p> <p>No comments from the group</p>  |
| 10. Operational Performance – Water Loss                | <p>JD – reviewed the water loss data as provided by MV, F20-08 signed and received<br/>           DM – spoke to the task force available to us through NWWBI explaining documentation has been sent out this week, something to consider but keep in mind it is a considerable amount of effort required<br/>           DT – commented that meters and backflow are at all but approximately 4 GWS stations now so this number will only become more refined<br/>           MM – spoke to the complexities of the AWWA Water Loss Spreadsheet<br/>           JA – commented that since our water loss number is considerably low we can anticipate that we are doing quite a good job recording these losses as is and therefore it should not necessitate looking for a greater solution (what would be the real benefit?)<br/>           CM – spoke to his concerns regarding I &amp; I and or sources such as rinks and parks that required estimations to determine our water loss percentage (there's always room for improvement)</p> |
| 11. Raw Water Supply and Drinking Water Trends – Sodium | <p>JD – reviewed the summary graph of all stations sampled for sodium, F20-08 signed and received<br/>           Group comment was made that the sodium is ever increasing at WPS 12<br/>           DT – commented that this well isn't running more than the others, operations staff are running the wells for approximately one hour per day</p>   |
| 12. Raw Water Supply and Drinking Water Trends - VOCs   | <p>JD – reviewed with the group only those stations that had detects in the VOC suite which included: Well 5, cis-1, 2 dichloroethylene, Well 11, cis-1, 2 dichloroethylene and tetrachloroethylene and finally Well 14, cis-1, 2 dichloroethylene and trichloroethylene<br/>           AIP – commented that the Log style function would better represent some of the graphs that have low values and high Ontario Standards</p> <p><b>Action Item: 17-016: use the Log function when necessary to better represent the graphical information from the VOC graphs – assigned to JD with a due date of April 5, 2017</b></p>  |
| 13. Raw Water Supply and Drinking Water Trends – THMs   | <p>JD – reviewed with the group the THM calculator, F20-08 signed and received</p> <p>No comment from the group</p>   |

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| 14. Summary of Consumer Feedback  | JD – showed a graphical representation of the customer complaints received and ameliorated over the past quarter, F20-08 signed and received<br>JA – inquired if we could look at this on GIS mapping<br>DM – commented to the group that this is work that will be created for us through the IT department on our behalf, and is currently with Annie Zhang  |
| 15. Efficacy of the Risk Assessment Process                                 | JD – reviewed a summary of the results of the risk assessment conducted on July 5, 2016, read aloud the recommendations for consideration in the 3 year review to be conducted in 2017<br><br>Group had no comments (all were present in the July 5, 2016 risk assessment meeting)   |
| 16. Incidents of Regulatory Non-Compliance                                  | JD – reviewed with the group the MOECC Drinking Water System Inspection Summary, no F20-08 was distributed for this, however this data is verified for inclusion in the Annual Report to Council<br>DM – noted that the title of the slide and the content do not correlate and a note should be added to be clear that there were no Regulatory non-compliances identified by the MOECC, and the information contained on the slide and table are Best Practice Issues and Actions Taken<br><br><b>Action Item: 17-017: clarify slide #37 of Q4 Management Review to reflect that there were NO Incidents of Regulatory Non-Compliance – assigned to JD with a due date of Jan 31, 2017</b> |
| 17. Operational Plan, Currency and Updates                                  | JD – provided the group with a brief overview of the efficiencies found over the course of the year and our migration to InSite<br><br>No comments from the group  |
| 18. Raw Water Supply and Drinking Water Trends – 2015 Golder Report Summary | JD – provided the group with a summary of the key points from the 2015 Golder Report focusing on the movement and detects of the North and South Plumes and the Municipal Aquifer, and the 5 recommendations, F20-08 signed and received<br><br>No comments from the group   |
| 19. Resources needed to Maintain QMS  | DM – provided the group with a summary of the allocation of resources as have been maintained since 2015 without change and 14 bullet points of projects that the QMS Team have championed over the course of the year, F20-08 signed and received<br><br>No comments from the group   |
| 20. Results of Internal/External Audits                                     | JD – reviewed the key points as found in both of the audits, F20-08 signed and received with both audit reports attached<br><br>No comments from the group   |
| 21. Results of Relevant Emergency Response Testing                          | AIP – provided a summary of the after action report from the new IMS structure of Emergency Response Testing reiterating that this has replaced the F20-06, After Action Report completed and parked electronically after completion of the revolution on November 10, 2016<br><br>No comments from the group  |
| 22. Results of Infrastructure Review  | JD – reviewed briefly what was received from GWS however no other group contributed to this F20-08<br>DM – reviewed the DWQMS to ensure we understand what is required of us to satisfy this portion of the review<br><br><b>Action Item: 17-018: Prepare a summary to satisfy the requirement of the DWQMS as it pertains to Infrastructure Review – assigned to DM and CM with a due date of February 13, 2017</b>   |
| 23. Status of Management Items between Reviews                              | JD – conducted a review of the Action Log to identify that there are no past outstanding items requiring action of the BMT, no F20-08 as the living document referred to as Action Log is the record for this item<br><br>No comments from the group   |

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| 24. Summary of CARs/CIPs         | <p>JD – provided the summary of the review as conducted by MV of the CARs and CIPs detailing the new progress of the CIP process and its evident improvement on our issue identification and resolution as a whole</p> <p>DM – noted to the group that although the CIP form has provided us with positive results it only provides work to be done on AWQIs and or Non-conformances and does not in fact address positive initiatives to be proposed by staff, the only avenue that addresses this is the staff suggestion box</p>  |
| 25. Summary of Staff Suggestions | <p>DM – summarized the staff suggestions as they applied to QMS which outlined 4 suggestions for Management consideration</p> <p><b>Action Item: 17-019: Staff suggestions from Q4 Management Review to be discussed by BMT for consideration – assigned to DM with a due date of January 26, 2017</b></p>   |
| 26. New Business                 | <p>JD – 3 items were brought forward as new business for discussion, they were: Trending Lead Results, Removal/replacement of F20-08, Watertrax/SGS and new sample sites</p> <p>JD – asked of the group if trending the results that we have so far would be interesting and or beneficial, and the group agreed to have a look at this for next Management Review Q1 2017</p> <p><b>Action Item: 17-020: graph Lead results for the past 4 or 5 years from lead sample sites for trending and presentation at Q1 2017 Management Review – assigned to JD with a due date of April 19, 2017</b></p> <p>DM – shared with the group that due to the presentation style of the Management Review that the F20-08 does not serve much purpose, so moving forward the form will be retired and all comments and review of data will occur at the Management Review Meeting and will be collected on Management Review Meeting Minutes and followed up with corresponding Action Log Items</p> <p>JB – shared with the group that with the addition of new sample parameter (HAA) and new sites to be added, Watertrax unique identifier will no longer be created, SGS will require the addition as should our either Eramosa or our Lab Tech for tag creation</p> <p>JA – added that lab services is in procurement review and therefore any and all required verbiage must make it into the procurement documents</p> <p><b>Action Item: 17-021: Contact SGS to inform them of new sites and inquire what is may be required from us – assigned to JB/DM with a due date of February 13, 2017</b></p> |

### Minutes Reviewed By

- Amanda Inglis-Petahtegoose (AIP)
- Diane Moreau (DM)
- Jeanette Dumais (JD)
- Jennifer Barrick (JB)
- Mark Vandergeest (MV)
- Michael Munshaw (MM)
- Chris Harper
- Chris Marchant
- Dave Truax
- Jamey Adams

**Next Meeting: 2017-04-19**

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