

Internal QMS Audit Report

LaSalle Water Distribution System

Owned & Operated by: The Town of LaSalle

Report Prepared By: Karen Burgess, Senior Operations Manager, OCWA

Report Issued: September 26, 2019

GENERAL INFORMATION**Audit Objectives:**

- To evaluate the conformance of the Quality Management System (QMS) as implemented at the Drinking Water System(s) listed below to the requirements of the Drinking Water Quality Management Standard (DWQMS) version 2.0 (v.2.0).
- To identify non-conformities with the documented QMS.
- To assess the effectiveness of the QMS and assist in its continual improvement.

Audit Criteria:

- DWQMS v.2.0
- Current Operational Plan for the LaSalle Water Distribution System, Revision 15 – Sept. 11, 2019
- QMS-related documents and records

Audit Scope:

Activities and processes related to QMS (as documented in the DWQMS Operational Plan) implemented at the following Drinking Water System(s) (DWS) owned by the Town of LaSalle:

1. LaSalle Water Distribution System

Auditor(s): Karen Burgess, Senior Operations Manager, OCWA

Participant(s): Lena Petros, Manager of Water & Wastewater and QMS Representative

Date(s): September 17, 2019

Audit Methods: Interviews, observation of activities and review of documentation and records

1. SUMMARY OF FINDINGS

The overall effectiveness of the QMS is considered: ☒ Effective ☐ Not effective

| DWQMS Element | Finding |
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| 1. Quality Management System | C |
| 2. Quality Management System Policy | C |
| 3. Commitment and Endorsement | C |
| 4. Quality Management System Representative | C |
| 5. Document and Records Control | OFI |
| 6. Drinking Water System | C |
| 7. Risk Assessment | OFI |
| 8. Risk Assessment Outcomes | C |

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| 9. Organizational Structure, Roles, Responsibilities and Authorities | C |
| 10. Competencies | OFI |
| 11. Personnel Coverage | C |
| 12. Communications | C |
| 13. Essential Supplies and Services | OFI |
| 14. Review and Provision of Infrastructure | C |
| 15. Infrastructure Maintenance, Rehabilitation and Renewal | C |
| 16. Sampling, Testing and Monitoring | OFI |
| 17. Measurement and Recording Equipment Calibration and Maintenance | C |
| 18. Emergency Management | C |
| 19. Internal Audits | C |
| 20. Management Review | C |
| 21. Continual Improvement | OFI |
| N/C | Non-Conformance – non-fulfillment of a requirement |
| OFI | Opportunity for Improvement – conforms to the requirement, but there is opportunity for improvement |
| C | Conforms to the requirement |

2. DETAILS OF FINDINGS

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| DWQMS Element/Reference | | |
| Element 5 – Document and Records Control | | |
| Type | | |
| <input type="checkbox"/> N/C | <input checked="" type="checkbox"/> OFI | <input type="checkbox"/> Auditor Comment |
| Description/Details | | |
| <p>Table 1 identifies many of the QMS documents as being available as a hard copy (HC) or electronic copy (EC) however now that City Wide is being utilized some of the documents are only available as EC.</p> <p>OFI – Table 1 must be updated to reflect the current control location for each QMS document.</p> | | |

| DWQMS Element/Reference | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---------------------------------------|-------------|-------------------------------------|-------------|------------------------|-------------|---|-------------|---|-------------|---------------------------------------|-------------|---------------------------------|----------------------|-------------------------|----------------------|----------|-------------------|---|-------------------|---|---|---|---------------------------------------|--------------|--|
| Element 7 - Risk Assessment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> N/C | <input checked="" type="checkbox"/> OFI <input type="checkbox"/> Auditor Comment | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Description/Details | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>The risk assessment process outlined in the Operational Plan identifies all the requirements.</p> <p>It also stated that the Risk Assessment team considers the Ministry's "Potential Hazardous Events for Municipal Drinking Water System" in the risk assessment process.</p> <p>OFI - It is recommended to include the actual list of Potential Hazardous Event/Hazard Reference Numbers (based on MOECC's "Potential Hazardous Events for Municipal Residential Drinking Water Systems"). Staff will then have a clear understanding of what is referenced for this requirement.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>System Type (indicate all that apply to this DWS)</th> <th>Description of Hazardous Event/Hazard</th> </tr> </thead> <tbody> <tr> <td>All Systems</td> <td>Long Term Impacts of Climate Change</td> </tr> <tr> <td>All Systems</td> <td>Water supply shortfall</td> </tr> <tr> <td>All Systems</td> <td>Extreme weather events (e.g., tornado, ice storm)</td> </tr> <tr> <td>All Systems</td> <td>Sustained extreme temperatures (e.g., heat wave, deep freeze)</td> </tr> <tr> <td>All Systems</td> <td>Chemical spill impacting source water</td> </tr> <tr> <td>All Systems</td> <td>Terrorist and vandalism actions</td> </tr> <tr> <td>Distribution Systems</td> <td>Sustained pressure loss</td> </tr> <tr> <td>Distribution Systems</td> <td>Backflow</td> </tr> <tr> <td>Treatment Systems</td> <td>Sudden changes to raw water characteristics (e.g., turbidity, pH)</td> </tr> <tr> <td>Treatment Systems</td> <td>Failure of equipment or process associated with primary disinfection (e.g., coagulant dosing system, filters, UV system, chlorination system)</td> </tr> <tr> <td>Treatment Systems and Distribution Systems providing secondary disinfection</td> <td>Failure of equipment or process associated with secondary disinfection (e.g., chlorination equipment, chloramination equipment)</td> </tr> <tr> <td>Treatment Systems using Surface Water</td> <td>Algal blooms</td> </tr> </tbody> </table> | System Type (indicate all that apply to this DWS) | Description of Hazardous Event/Hazard | All Systems | Long Term Impacts of Climate Change | All Systems | Water supply shortfall | All Systems | Extreme weather events (e.g., tornado, ice storm) | All Systems | Sustained extreme temperatures (e.g., heat wave, deep freeze) | All Systems | Chemical spill impacting source water | All Systems | Terrorist and vandalism actions | Distribution Systems | Sustained pressure loss | Distribution Systems | Backflow | Treatment Systems | Sudden changes to raw water characteristics (e.g., turbidity, pH) | Treatment Systems | Failure of equipment or process associated with primary disinfection (e.g., coagulant dosing system, filters, UV system, chlorination system) | Treatment Systems and Distribution Systems providing secondary disinfection | Failure of equipment or process associated with secondary disinfection (e.g., chlorination equipment, chloramination equipment) | Treatment Systems using Surface Water | Algal blooms | |
| System Type (indicate all that apply to this DWS) | Description of Hazardous Event/Hazard | | | | | | | | | | | | | | | | | | | | | | | | | | |
| All Systems | Long Term Impacts of Climate Change | | | | | | | | | | | | | | | | | | | | | | | | | | |
| All Systems | Water supply shortfall | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| All Systems | Terrorist and vandalism actions | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Distribution Systems | Sustained pressure loss | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Distribution Systems | Backflow | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Treatment Systems | Sudden changes to raw water characteristics (e.g., turbidity, pH) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Treatment Systems | Failure of equipment or process associated with primary disinfection (e.g., coagulant dosing system, filters, UV system, chlorination system) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Treatment Systems and Distribution Systems providing secondary disinfection | Failure of equipment or process associated with secondary disinfection (e.g., chlorination equipment, chloramination equipment) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Treatment Systems using Surface Water | Algal blooms | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| DWQMS Element/Reference Element 10 - Competencies |
| Type <input type="checkbox"/> N/C <input checked="" type="checkbox"/> OFI <input type="checkbox"/> Auditor Comment |
| <p>The required competencies noted in Table 6 are established when designing job descriptions for particular positions. These competencies are then discussed with new staff during the recruitment process.</p> <p>It is indicated that a training Matrix is utilized to:</p> <ul style="list-style-type: none"> • Develop the skills and increase the knowledge of Operations staff and management, • Provide operations with information and access to resources that can assist them in performing their duties, • Assist operators in meeting the regulatory requirements with respect to training. <p>OFI - Since the training Matrix is only utilized for tracking training, it is recommended that first two bullets be reworded or removed.</p> |

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| DWQMS Element/Reference Element 13 – Essential Supplies & Services |
| Type <input type="checkbox"/> N/C <input checked="" type="checkbox"/> OFI <input type="checkbox"/> Auditor Comment |
| Description/Details <p>An Essential Supplies & Services Contact List for the Public Works is listed in Table. The list includes names and telephone numbers for each of the suppliers and services that could be required. The procedure also identifies that this list is reviewed at least annually and updated as required.</p> <p>OFI – The contractor utilized for the annual third party calibration of the backflow preventers as identified in element 6 is not identified on the contact list and should be added.</p> |

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| DWQMS Element/Reference Element 16 – Sampling, Testing & Monitoring |
| Type <input type="checkbox"/> N/C <input checked="" type="checkbox"/> OFI <input type="checkbox"/> Auditor Comment |
| Description/Details <p>All sampling, monitoring and testing is conducted at a minimum in accordance with SDWA O. Reg. 170/03. All sampling, testing and monitoring results are maintained at the Public Works office and are readily assessable to all staff if needed. Results are also shared with the Owner through the section 11 and schedule 22 annual reports and also through the Management Review process.</p> <p>It also indicates that all samples are submitted to an accredited laboratory however this was not provided upon request.</p> <p>OFI – Obtain a copy of the current laboratory accreditation and keep on file.</p> |

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| DWQMS Element/Reference Element 20 – Management Review | | |
| Type <input type="checkbox"/> N/C <input checked="" type="checkbox"/> OFI <input type="checkbox"/> Auditor Comment | | |
| Description/Details The Management Review must be conducted at least once every calendar year. The previous Management Review was conducted on September 17, 2018 and the most recent Management Review was conducted on September 13, 2019. OFI – It is recommended to hold the Management Review after the internal audit is fully completed so that any action items identified can be immediately reviewed and implemented as needed instead of reviewing them a year later. | | |

3. AUDIT CONCLUSIONS

The auditor conducted an internal audit of the Town of LaSalle's QMS focusing on key quality management processes necessary to consistently produce and distribute drinking water that meets applicable requirements.

Taking into consideration all the findings of this audit and the above noted Opportunities for Improvement (OFI), the auditor has concluded that sufficient evidence has been provided to demonstrate that a QMS that meets the intent of the DWQMS v.2.0 has been established and actively implemented at this facility.