

Audit Report

Re Accreditation Audit for

The Corporation of the City of Kawartha Lakes

1631768-02

Audited Address: 322 Kent St. W, Lindsay, Ontario, CAN, K9V 5R8

Start Date: Jul 19, 2021 End Date: Jul 21, 2021

Type of audit – On-site Verification Audit

Issue Date: Jul 22, 2021

Revision Level: *Final*

BACKGROUND INFORMATION

SAI Global conducted an audit of The Corporation of the City of Kawartha Lakes beginning on Jul 19, 2021 and ending on Jul 21, 2021 to DRINKING WATER QUALITY MANAGEMENT STANDARD VERSION 2 - 2017.

The purpose of this audit report is to summarise the degree of compliance with relevant criteria, as defined on the cover page of this report, based on the evidence obtained during the audit of your organization. This audit report considers your organization's policies, objectives, and continual improvement processes. Comments may include how suitable the objectives selected by your organization appear to be in regard to maintaining customer satisfaction levels and providing other benefits with respect to policy and other external and internal needs. We may also comment regarding the measurable progress you have made in reaching these targets for improvement.

SAI Global audits are carried out within the requirements of SAI Global procedures that also reflect the requirements and guidance provided in the international standards relating to audit practice such as ISO/IEC 17021-1, ISO 19011 and other normative criteria. SAI Global Auditors are assigned to audits according to industry, standard or technical competencies appropriate to the organization being audited. Details of such experience and competency are maintained in our records.

In addition to the information contained in this audit report, SAI Global maintains files for each client. These files contain details of organization size and personnel as well as evidence collected during preliminary and subsequent audit activities (Documentation Review and Scope) relevant to the application for initial and continuing certification of your organization.

Please take care to advise us of any change that may affect the application/certification or may assist us to keep your contact information up to date, as required by SAI Global Terms and Conditions.

This report has been prepared by SAI Global Limited (SAI Global) in respect of a Client's application for assessment by SAI Global. The purpose of the report is to comment upon evidence of the Client's compliance with the standards or other criteria specified. The content of this report applies only to matters, which were evident to SAI Global at the time of the audit, based on sampling of evidence provided and within the audit scope. SAI Global does not warrant or otherwise comment upon the suitability of the contents of the report or the certificate for any particular purpose or use. SAI Global accepts no liability whatsoever for consequences to, or actions taken by, third parties as a result of or in reliance upon information contained in this report or certificate.

Please note that this report is subject to independent review and approval. Should changes to the outcomes of this report be necessary as a result of the review, a revised report will be issued and will supersede this report.

Standard:	DRINKING WATER QUALITY MANAGEMENT STANDARD VERSION 2 - 2017
Scope of Certification:	Full Scope – Entire DWQMS
Drinking Water System Owner:	The Corporation of the City of Kawartha Lakes
Operating Authority:	The Corporation of the City of Kawartha Lakes
Owner:	The Corporation of the City of Kawartha Lakes
Population Served:	30208
Activities:	Treatment (Lindsay DWS, Sonya Village DWS and Manilla DWS) and Distribution (all systems) Lindsay Drinking Water System (license # 141-120) Birchpoint Estates Drinking Water System (license # 141-109) Bobcaygeon Drinking Water System (license # 141-105) Canadiana Shores Drinking Water System (license # 141-112) Fenelon Falls Drinking Water System (license # 141-104) Janetville Drinking Water System (license # 141-111) Kings Bay Drinking Water System (license # 141-119) Kinmount Drinking Water System (license # 141-121) Manilla Drinking Water System (license # 141-106) Manorview Drinking Water System (license # 141-118) Drinking Water Systems Mariposa Estates Drinking Water System (license # 141-117) Norland Drinking Water System (license # 141-103) Omemee Drinking Water System (license # 141-108) Pinewood Drinking Water System (license # 141-110) Pleasant Point Drinking Water System (license # 141-113) Sonya Village Subdivision Drinking Water System (license # 141-107) Southview Drinking Water System (license # 141-101) Victoria Place Drinking Water System (license # 141-114) Western Trent/Palmina Drinking Water System (license # 141-102) Woodfield Drinking Water System (license # 141-116) Woodville Drinking Water System (license # 141-115)
Total audit duration:	Person(s): 1 Day(s): 2.75
Audit Team Member:	Team Leader Paul Cartlidge

Audit Report

Definitions and action required with respect to audit findings

Major Non-conformance:

Based on objective evidence, the absence of, or a significant failure to implement and/or maintain conformance to requirements of the applicable standard. Such issues may raise significant doubt as to the capability of the management system to achieve its intended outputs (i.e. the absence of or failure to implement a complete Management System clause of the standard); or

A situation which would on the basis of available objective evidence, raise significant doubt as to the capability of the Management System to achieve the stated policy and objectives of the customer.

NOTE: The "applicable Standard" is the Standard which SAI Global are issuing certification against, and may be a Product Standard, a management system Standard, a food safety Standard or another set of documented criteria.

Action required: This category of findings requires SAI Global to issue a formal NCR; to receive and approve client's proposed correction and corrective action plans; and formally verify the effective implementation of planned activities. Correction and corrective action plan should be submitted to SAI Global prior to commencement of follow-up activities as required. Follow-up action by SAI Global must 'close out' the NCR or reduce it to a lesser category within 90 days for initial certification and within 60 days for surveillance or re-certification audits, from the last day of the audit.

If significant risk issues (e.g. safety, environmental, food safety, product legality/quality, etc.) are detected during an audit these shall be reported immediately to the Client and more immediate or instant correction shall be requested. If this is not agreed and cannot be resolved to the satisfaction of SAI Global, immediate suspension shall be recommended.

In the case of initial certification, failure to close out NCR within the time limits means that the Certification Audit may be repeated.

If significant risk issues (e.g. safety, environmental, food safety, product legality/quality, etc.) are detected during an audit these shall be reported immediately to the Client and more immediate or instant correction shall be requested. If this is not agreed and cannot be resolved to the satisfaction of SAI Global, immediate suspension shall be recommended.

In the case of an already certified client, failure to close out NCR within the time limits means that suspension proceedings may be instituted by SAI Global.

Follow-up activities incur additional charges.

Minor Non-conformance:

Represents either a management system weakness or minor issue that could lead to a major nonconformance if not addressed. Each minor NC should be considered for potential improvement and to further investigate any system weaknesses for possible inclusion in the corrective action program

Action required: This category of findings requires SAI Global to issue a formal NCR; to receive and approve client's proposed correction and corrective action plans; and formally verify the effective implementation of planned activities at the next scheduled audit.

Opportunity for Improvement:

A documented statement, which may identify areas for improvement however shall not make specific recommendation(s).

Action required: Client may develop and implement solutions in order to add value to operations and management systems. SAI Global is not required to follow-up on this category of audit finding.

Audit Type and Purpose

On-site Verification Audit:

An onsite audit to assess whether a QMS has been implemented for the subject system that meets the “DO” requirements of the DWQMS V2.

Audit Objectives

The objective of the audit was to determine whether the drinking water Quality Management System (QMS) of the subject system conforms to the requirements of the Ontario Ministry of the Environment & Climate Change (MOECC) Drinking Water Quality Management Standard (DWQMS V2).

The audit was also intended to gather the information necessary for SAI Global to assess whether accreditation can continue or be offered or to the operating authority.

Audit Scope

The facilities and processes associated with the operating authority's QMS were objectively evaluated to obtain audit evidence and to determine a) whether the quality management activities and related results conform with DWQMS V2 requirements, and b) if they have been effectively implemented and/or maintained.

Audit Criteria:

- The Drinking Water Quality Management Standard Version 2
- Current QMS manuals, procedures and records implemented by the Operating Authority
- SAI Global Accreditation Program Handbook

Confidentiality and Documentation Requirements

The SAI Global stores their records and reports to ensure their preservation and confidentiality. Unless required by law, the SAI Global will not disclose audit records to a third party without prior written consent of the applicant. The only exception will be that the SAI Global will provide audit and corrective action reports to the Ontario Ministry of the Environment. For more information, please refer to the SAI Global Accreditation Program Handbook.

As part of the SAI Global Terms, it is necessary for you to notify SAI Global of any changes to your Quality Management System that you believe are significant enough to risk non-conformity with DWQMS V2: For more information, please refer to the SAI Global Accreditation Program Handbook.

Review of any changes

Changes to the Operating Authority since last audit include: The Corporation of the City of Kawartha Lakes is now assuming responsibility as the Operating Authority for the Treatment portion of the Sonya Village and Manilla Drinking Water Systems as of March 1, 2021.

EXECUTIVE OVERVIEW

Based on the results of this onsite verification audit (Stage 2) and the results of the System audit (Stage 1) it has been determined that the management system is effectively implemented and meets the requirements of the standard relative to the scope of certification identified in this report; therefore, a recommendation for certification will be submitted to SAI Global review team.

Recommendation

Based on the results of this audit it has been determined that the management system is effectively implemented and maintained and meets the requirements of the standard relative to the scope of certification identified in this report; therefore, a recommendation for continued certification will be submitted to SAI Global review team.

Opportunities for Improvement:

The following opportunities for improvement have been identified.

- Element # 13 – Consider performing follow-up with the supplier of caustic soda for verification that NSF grade is being received
- Element # 17 – Consider adding the hand-held UV verification unit onto the list of monitoring and measuring devices (calibration is performed prior to use as per manufacturer's instructions).
- Element # 17 – Consider performing external calibration as soon as feasible for any newly installed equipment that is on an external calibration schedule
- Element # 21 – Consider keeping CARs open until all relevant information related to the incident is received and documented
- Element # 21 – Consider further engagement with Management and front-line staff for identification of Best Management Practices

It is suggested that the opportunities for improvement be considered by management to further enhance the Operating Authority's Quality Management System and performance.

Management System Documentation

The management systems operational plan was reviewed and found to be in conformance with the requirements of the standard.

Management Review

Records of the most recent management review meetings were verified and found to meet the requirements of the standard. All inputs were reflected in the records, and appear suitably managed as reflected by resulting actions and decisions.

Internal Audits

Internal audits are being conducted at planned intervals to ensure conformance to planned arrangements, the requirements of the standard and the established management system.

Corrective, Preventive Action & Continual Improvement Processes

The Operating Authority is implementing an effective process for the continual improvement of the management system through the use of the quality policy, quality objectives, audit results, data analysis, the appropriate management of corrective and preventive actions and management review.

Summary of Findings

1. Quality Management System	Conforms
2. Quality Management System Policy	Conforms
3. Commitment and Endorsement	Conforms
4. Quality Management System Representative	Conforms
5. Document and Records Control	Conforms
6. Drinking-Water System	Conforms
7. Risk Assessment	Conforms
8. Risk Assessment Outcomes	Conforms
9. Organizational Structure, Roles, Responsibilities and Authorities	Conforms
10. Competencies	Conforms
11. Personnel Coverage	Conforms
12. Communications	Conforms
13. Essential Supplies and Services	OFI
14. Review and Provision of Infrastructure	Conforms
15. Infrastructure Maintenance, Rehabilitation & Renewal	Conforms
16. Sampling, Testing and Monitoring	Conforms
17. Measurement & Recording Equipment Calibration and Maintenance	OFI x 2
18. Emergency Management	Conforms
19. Internal Audits	Conforms
20. Management Review	Conforms
21. Continual Improvement	OFI x 2
Major NCR #	Major non-conformity. The auditor has determined one of the following: (a) a required element of the DWQMS has not been incorporated into a QMS; (b) a systemic problem with a QMS is evidenced by two or more minor non-conformities; or (c) a minor non-conformity identified with a corrective action request has not been remedied.
Minor NCR #	Minor non-conformity. In the opinion of the auditor, part of a required element of the DWQMS has not been incorporated satisfactorily into a QMS.
OFI	Opportunity for improvement. Conforms to requirement, but there is an opportunity for improvement.
Conforms	Conforms to requirement.
NANC	Not applicable/Not Covered during this audit.
****	Additional comment added by auditor in the body of the report.

PART D. Audit Observations, Findings and Comments

DWQMS Reference:	1 Quality Management System
Client Reference:	QMS E1 Overview of Operational Plan, revision 8, March 1, 2021
<p>Details: Documented Quality Management System is described in the City of Kawartha Lakes Operational Plan. Reference is added throughout the Operational Plan for the Treatment portions of the Woods of Manilla DWS and Sonya Subdivision DWS. Reviewed and accepted.</p>	

DWQMS Reference:	2 Quality Management System Policy
Client Reference:	QMS E2 Quality Management System Policy (2021 Endorsement), revision 1, March 1, 2020
<p>Details: Policy Statement describes the goals of the Quality Management System – reviewed and accepted. Policy Statement is endorsed by The Mayor and CAO of the City of Kawartha Lakes in February 2021. Through interviews of staff and observations on-site pertaining to the other requirements of the DWQMS, the policy is effectively implemented.</p>	

DWQMS Reference:	3 Commitment and Endorsement
Client Reference:	QMS E3 Commitment and Endorsement, revision 1, January 14, 2021
<p>Details: QMS E3 is signed by the Director, Public Works, Manager, Environmental Services and Supervisor/ORO in February 2021. The Owner (represented by Mayor and Council) also endorses the Operational Plan through a Council Resolution represented by the Director, Public Works. Through interviews of staff and observations on-site pertaining to the other requirements of the DWQMS, Top Management has demonstrated evidence of the commitment to the Quality Management System.</p>	

DWQMS Reference:	4 Quality Management System Representative
Client Reference:	QMS E4 QMS Representative, revision 6, January 14, 2021
<p>Details: The role of QMS Representative is appointed through procedure QMS E4 and the letter of appointment for the Quality Management and Policy Coordinator signed February 2021. Reviewed and accepted. Through interviews of staff and observations on-site, the QMS rep maintains procedures needed for the QMS, management reports, training of personnel and promotion of the QMS in the City of Kawartha Lakes. Regular DWQMS training sessions are performed and recorded as part of training activities.</p>	

DWQMS Reference:	5 Document and Record Control
Client Reference:	QMS E5 Document and Records Control, revision 15, January 14, 2021
<p>Details: Procedure E5 contains instructions for documents and records control. Reviewed and accepted. Revisions to procedures are managed by the QMS rep including updates to electronic and hard copies. Current versions of documents are available on the Sharepoint site. QMS rep sends an e-mail on a monthly basis indicating all new/revised documents being released (viewed for July 2021). Hard copies of documents are printed if necessary and placed in binders by the water system Supervisors. Changes to documents are requested through the Document Change form (reviewed for Document Master List July 2021). Records are appropriately maintained at the City of Kawartha Lakes Public Works office and on municipal servers. Back-ups are performed daily. Long Term Records storage is at a separate City of Kawartha Lakes facility. Retention period is defined in By-Law 2017-066.</p>	

Audit Report

DWQMS Reference:	6 Drinking Water System
Client Reference:	QMS E6 Drinking Water System, revision 18, March 1, 2021 QMS E16 Ap A Drinking Water System – Lindsay, rev. 0, March 1, 2021 QMS E16 Ap B Drinking Water System – Manilla, rev. 0, March 1, 2021 QMS E16 Ap C Drinking Water System – Sonya, rev. 0, March 1, 2021 QMS E16 Ap D Drinking Water System – Remaining CKL Owned DWS, rev. 0, March 1, 2021
Details: Contents of Drinking Water System Descriptions reviewed and accepted for all systems including: <ul style="list-style-type: none">• Lindsay Drinking Water System (Treatment and Distribution)• Sonya Village Subdivision Drinking Water System (Treatment and Distribution)• Manilla Drinking Water System (Treatment and Distribution)• Bobcaygeon Drinking Water System (Distribution only)• Canadiana Shores Drinking Water System (Distribution only)• Fenelon Falls Drinking Water System (Distribution only)• Janetville Drinking Water System (Distribution only)• Kings Bay Drinking Water System (Distribution only)• Kinmount Drinking Water System (Distribution only)• Manorview Drinking Water System (Distribution only)• Mariposa Estates Drinking Water System (Distribution only)• Norland Drinking Water System (Distribution only)• Omemee Drinking Water System (Distribution only)• Pinewood Drinking Water System (Distribution only)• Pleasant Point Drinking Water System (Distribution only)• Southview Drinking Water System (Distribution only)• Victoria Place Drinking Water System (Distribution only)• Woodfield Drinking Water System (Distribution only)• Woodville Drinking Water System (Distribution only)• Western Trent/Palmina Drinking Water System (Distribution only)• Birchpoint Estates Drinking Water System (Distribution only) Facilities visited during the audit matched the Drinking Water System description (Lindsay treatment plant, Sonya DWS, Manilla DWS). The Manilla DWS is currently only partially operating due to a well failure and water is being hauled from the Lindsay DWS as described in applicable procedures. Plant parameters and sampling continue to be performed as described in the sampling plan.	

DWQMS Reference	7 Risk Assessment
Client Reference:	QMS E7 Risk Assessment, revision 12, March 1, 2021
Details: Procedure E7 reviewed and accepted.	

DWQMS Reference:	8 Risk Assessment Outcomes
Client Reference:	QMS E8 Risk Assessment Outcomes, revision 1, March 1, 2021 Appendix QMS E8 Ap 01 Risk Assessment Rating & Best Management Practices, rev. 4, June 25, 2018 Table QMS E8 T1 Risk Assessment – Lindsay, rev. 0, September 23, 2020 Table QMS E8 T2 Summary of Critical Control Points – Lindsay, rev. 0, September 23, 2020

Audit Report

	Table QMS E8 T3 Risk Assessment – Manilla, rev. 0, March 1, 2021 Table QMS E8 T4 Risk Assessment – Sonya, rev. 0, March 1, 2021
<p>Details: Risk Assessment Outcomes adequately describes all risk, hazards, hazardous events and critical control limits for the Drinking Water System and covers all required risks as described in the MOECC document “Potential Hazardous Events for Municipal Residential Drinking Water Systems”. Risk assessment outcomes are summarized in the Risk Assessment Tables and are current for Lindsay DWS and all Distribution Systems as of September 2020 when the most recent annual review was performed. New Risk Assessment Outcomes were established for the Manilla DWS and Sonya DWS in March 2021, and risk ratings and CCPs are now defined). Reviewed and accepted.</p>	
DWQMS Reference:	9 Organizational Structure, Roles, Responsibility and Authorities
Client Reference:	QMS E9 Organizational Structure, Roles, Responsibility and Authorities, revision 7, March 1, 2021 QMS E9 Appendix A Water and Wastewater Division Organizational Chart, revision 12, January 20, 2021
<p>Details: Procedure E9 reviewed and accepted. Organizational structure verified as accurate during the audit (as described in Organizational Chart QMS_09_Ap_A). Top Management is adequately identified in the procedure and verified on-site. Structure is communicated to the staff through DWQMS training.</p>	
DWQMS Reference:	10 Competencies
Client Reference:	QMS E10 Competencies, revision 16, January 19, 2021 QMS E10 T1 Competencies Table, revision 12, November 20, 2020
<p>Details: Procedure E10 reviewed and accepted.</p> <p>Competencies by position for all personnel reviewed and are adequately described in QMS-10 and the associated table. Process in place for initial and ongoing training for personnel performing duties affecting drinking water quality. Reviewed and accepted.</p> <p>Training records are tracked by operator for the required number of hours for maintaining operator certification with a spreadsheet maintained by the QMS Rep, including capturing legislative and regulatory requirements, as well as safety topics and other mandatory training required by the City.</p> <p>Reviewed operator certification and training records from 2021 for:</p> <ul style="list-style-type: none"> • JL, Water Distribution and Supply Class III, license # 49162 exp. May 31, 2022 • NB, Water Treatment Class IV license # 70437 exp. May 31, 2022 	
DWQMS Reference:	11 Personnel Coverage
Client Reference:	QMS E11 Personnel Coverage, revision 14, March 1, 2021
<p>Details: Procedure E11 reviewed and accepted.</p> <p>Staff schedule viewed for Treatment and Distribution Operators. On-call operator is identified for both treatment and distribution system responsibilities. On-call duties defined on a schedule and rotate through staff on a weekly basis, changing every Thursday. All operators have at minimum OIT up to class 3 Treatment and Distribution certification. Viewed on-call schedule for July 2021.</p>	

Audit Report

DWQMS Reference:	12 Communications
Client Reference:	QMS E12 Communications, revision 8, January 19, 2020
<p>Details: Procedure E12 reviewed and accepted.</p> <p>Annual Report on the performance of the QMS is generated by the QMS rep and presented to council (most recent report provided on March 9, 2021).</p> <p>Water & Wastewater team meetings as performed monthly and the QMS Rep also performs DWQMS Awareness sessions on a regular basis for all operators (viewed for June 2021)..</p> <p>Communications with suppliers is performed through a letter sent to all companies on the Essential Supplies and Contractors Listing (most recent letters sent in January 2021). Specific QMS requirements are also specified in tenders for larger contracts.</p> <p>Quality Management System Policy is available on the City of Kawartha Lakes website.</p> <p>Community complaints are received from various sources (calls, website, e-mail, etc.). Summary of consumer complaints is compiled for management review – summary includes a breakdown of calls/complaints for water/wastewater divided into categories for the past fiscal year and used as input for Management Review.</p>	

DWQMS Reference:	13 Essential Supplies and Services
Client Reference:	QMS E13 Essential Supplies and Services, revision 11, January 28, 2021 QMS E13 L1 Essential Supplies and Services List, rev. 6, March 1, 2021 QMS E13 Ap D Essential Suppliers and Contractors Listing, February 2021
<p>Details: Procedure E13 and supplier list reviewed and accepted.</p> <p>Essential Supplies and Services List contains a list of all approved supplies. Appendix D contains a list of all approved suppliers and subcontractors. Reviewed and accepted.</p> <p>Reviewed method for ensuring quality for the following essential supplies and services:</p> <ul style="list-style-type: none">• Chemical Suppliers Chemtrade (Alum), Brenntag (Sodium Silicate) - NSF certifications for chemicals viewed on C of A or Bill Of Lading• Laboratory Services provided by SGS Lakefield (viewed CALA certificate exp. Sept 2, 2023 and DW Testing Laboratory certificate exp. Sept 30, 2023).• Filters/system components meet NSF/ANSI specifications (e.g. filters in use at Sonya DWS) <p>Opportunity for Improvement: Consider performing follow-up with the supplier of caustic soda for verification that NSF grade is being received</p>	

DWQMS Reference:	14 Review and Provision of Infrastructure
Client Reference:	QMS E14 Review and Provision of Infrastructure, revision 11, January 28, 2021
<p>Details: Procedure E14 reviewed and accepted. Capital works projects are on a 5-year budget forecast with details provided to Council. An additional 5 years (for a total of 10 years, long-term plan) is completed to develop a summary of the remaining list of projects/priorities. Risk Assessment outcomes are utilized to assist with prioritization of projects. 18 DWS are being operated by OCWA for the treatment portion and Infrastructure recommendations are provided by the OA. For all distribution systems and the 3 treatment systems being operated by the City are brought within the existing process. Growth is also considered as part of the long term planning process. Viewed long-term capital plan for 2021-2030 as prepared by a consultant for the City.</p>	

Audit Report

DWQMS Reference:	15 Infrastructure Maintenance, Rehabilitation and Renewal
Client Reference:	QMS E15 Infrastructure Maintenance, Rehabilitation and Renewal, revision 15, January 19, 2021
<p>Details: Procedure E15 reviewed and accepted.</p> <p>Maintenance system used is a combination of spreadsheets, maintenance forms and a work order system for staff completing requested tasks (on a daily, weekly, monthly, quarterly or annual schedule).</p> <p>Sampled the following equipment for maintenance activities and viewed associated records:</p> <ul style="list-style-type: none">• Weekly/monthly tasks for Lindsay Treatment Plant for July 2021• Annual tasks for Lindsay Treatment Plant (released in stages throughout the year).• Weekly/monthly tasks for Sonya DWS and Manilla DWS for July 2021• Back-up generator annual service for Lindsay DWS, Sonya DWS, Manilla DWS• Lindsay Distribution System Hydrant flushing and Valve Exercising 2020• Bobcaygeon Distribution System Valve exercising 2020• Fenelon Falls Distribution System Dip Testing 2020	

DWQMS Reference:	16 Sampling, Testing and Monitoring
Client Reference:	QMS E16 Sampling, Testing and Monitoring, revision 11, March 1, 2021 Table QMS E16 T1, T2 and T3 Drinking Water Systems: Sampling, Testing and Monitoring (for Lindsay DWS, Manilla DWS and Sonya DWS respectively)
<p>Details: Procedure E16 and sampling tables/schedules reviewed and accepted.</p> <p>Sampling calendars have been generated the treatment facilities (Lindsay, Sonya and Manilla, and all distribution systems). The owner is provided with an annual summary of sampling, testing and monitoring results. Procedures and Sampling Calendars reviewed and accepted.</p> <p>Daily log books recording all critical facility parameters observed in use at the sites visited during the audit. Data loggers are in place for continuous monitoring, SCADA systems are programmed to alarm at specific set points. Reviewed the Lindsay Treatment Plant, Verulam Tower, Thornhill Reservoir, Sonya DWS and Manilla DWS Daily Log Sheets for July 2021.</p> <p>Distribution System sampling is performed by the Ontario Clean Water Agency under contract (Operating Authority for the Treatment portion of the 18 systems excluding Lindsay, Sonya and Manilla).</p> <p>Sampled laboratory testing reports according to requirements as detailed in the sampling tables:</p> <ul style="list-style-type: none">• Lindsay DWS: Schedule 23/24 Jan 2021, Quarterly Nitrates, THMs, HAAs July 2021, Bacterial Testing July 2021, Microcystin testing July 2021, Suspended Solids July 2021• Sonya DWS Bacterial testing March 2021, Quarterly Nitrates, THMs, HAAs April 2021• Manilla Bacterial Testing April 2021, Quarterly Nitrates, THMs, HAAs April 2021 – all testing continues to be performed as per schedule even though water is being hauled to the system (with the exception of raw water, which is not currently being produced)	

Audit Report

DWQMS Reference:	17 Measurement and Recording Equipment Calibration and Maintenance
Client Reference:	QMS E17 Measurement and Recording Equipment Calibration and Maintenance, revision 11, January 29, 2021
<p>Details: Procedure E17 reviewed and accepted. Measuring and Recording equipment for Manilla DWS and Sonya DWS have been added to the Equipment Inventory and Calibration schedule.</p> <p>Master List of Devices is maintained by the Operating Authority.</p> <p>Viewed the calibration records for the following monitoring and measuring devices, found to be in date and documented:</p> <ul style="list-style-type: none"> • Lindsay DWS Actiflo 1 flow meter FIT-201 cal. Sept 22/20 (annual) • Lindsay DWS Actiflo 2 flow meter FIT-202 cal. Sept 22/20 (annual) • Lindsay DWS Actiflo pH Analyser AIT-201 cal. Sept 22/20 (annual) • Lindsay DWS Treated Water Chlorine Analyser AIT 112B cal. Sept 22/20 (annual) • Lindsay DWS Distribution Water Turbidity Analyser AIT-107 cal. Sept 22/20 (annual – noted as found out of calibration by 0.1 NTU however the unit is continually checked and calibrated in-house during the year so minimum impact) • Lindsay DWS Distribution Water Chlorine Analyser AIT-108 cal. Sept 22/20 (annual) • Lindsay DWS Laboratory DR3900 Spectrophotometer SN 1549537 cal. 08 Jun 2021 (annual) • Lindsay DWS Laboratory 2100N Turbidimeter SN 041200009957 cal. 08 Jun 2021 (annual) • Lindsay DWS Laboratory pH meter SN 445190 cal. 07 Jun 2021 (annual) • Thornhill Reservoir outlet chlorine analyser AIT-304 cal. Sept 22/20 (annual) • Thornhill Reservoir Pressure transmitter SN 89H-16930 cal. Sept 23/20 (annual) • Verulam Tower Flow Meter FIT-107 cal. Sept 23/20 (annual) • Verulam Tower VGR SN F3008304267 cal. Sept 23/20 (annual) • Sonya DWS Well # 1 flow meter cal. 10/7/20 (annual) • Sonya DWS Distribution Chlorine Analyser SN 2008001326 cal. 10/7/20 (annual) • Sonya UV system is verified using a hand-held UVT analyser which is calibrated with DI water prior to use. • Manilla DWS Chlorine Analyser SN 200054738 cal. 5/27/21 (annual) • Manilla DWS Turbidity Analyser SN 110459001151 cal. 5/27/21 (annual) <p>Opportunities for Improvement:</p> <ul style="list-style-type: none"> • Consider adding the hand-held UV verification unit onto the list of monitoring and measuring devices (calibration is performed prior to use as per manufacturer's instructions). • Consider performing external calibration as soon as feasible for any newly installed equipment that is on an external calibration schedule 	

DWQMS Reference:	18 Emergency Management
Client Reference:	<p>QMS E18 Emergency Management, revision 12, March 1, 2021</p> <p>QMS E18 L1 2021 Water and Wastewater Emergency Contact Listing, rev. 0, December 3, 2020</p> <p>QMS E18 Plan 01 Manilla DWS Contingency Plan, rev. 0, March 1, 2021</p> <p>QMS E18 Plan 02 Sonya DWS Contingency Plan, rev. 0, March 1, 2021</p> <p>QMS E18 Plan 04 Lindsay DWS Contingency Plan, rev. 18, February 23, 2021</p> <p>WT-11 Supply of Hauled Water to DWS from other source by Water Truck</p>

Audit Report

Details: Procedure E18 and Contingency Plans reviewed and accepted.

General requirements are described in procedure QMS-18 and the City of Kawartha Lakes Corporate Emergency Plan. Response procedures are described in numerous SOPs. A specific contingency plan exists for the Lindsay, Sonya and Manilla treatment facilities. Emergency contact list is current (December 2020). Reviewed and accepted.

Copies of the Facility Emergency Plan were available at each of the sites visited during the audit.

Emergency Response Exercise Test was performed in March 2020 regarding a scenario for Severe Weather causing flooding and included general emergency response steps and specific DWS aspects. All operators participated and training captured on the training log.

Contingency Plan for the Manilla DWS was recently enacted as the production well recently collapsed and an alternate source of water is being provided until the new production well is placed into service.

DWQMS Reference:	19 Internal Audits
------------------	--------------------

Client Reference:	QMS E19 Internal Audits, revision 9, January 19, 2021
-------------------	-------------------------------------------------------

Details: Procedure E19 reviewed and accepted. Most recent Internal Audit was performed in May 2021 focussed on particular DWQMS elements as pertaining to the Sonya and Manilla DWS Treatment portion as the City took over as Operating Authority on March 1, 2021. No non-conformances and 8 Opportunities for Improvement were identified. The last full Internal Audit was performed in November 2020 focussed on the Treatment portion for Lindsay and all Distribution systems. No non-conformances and 8 Opportunities for Improvement were identified. A DWQMS training session was scheduled for staff as follow-up on the OFIs and an OFI follow-up form is completed to document the status of each of each OFIs, and close as completed (e.g. all 8 OFIs from the 2020 Internal Audit).

DWQMS Reference:	20 Management Review
------------------	----------------------

Client Reference:	QMS E20 Management Review, revision 8, April 26, 2018
-------------------	-------------------------------------------------------

Details: Procedure E20 captures all PLAN requirements from section 20 of the DWQMS. Management Reviews are conducted a minimum of once every calendar year. Reviewed and accepted. Most recent Management Review Meeting was performed on May 12, 2021, covering the period from July 31, 2020 to May 1, 2021. Individual reports are created for each of the input items and are presented to Top Management in the Water & Wastewater Division for discussion. Action items are identified for completion through DWQMS training sessions to be completed later in the year. The full Management Review report will be included as a presentation to Council planned for December 2021.

DWQMS Reference:	21 Continual Improvement
------------------	--------------------------

Client Reference:	QMS E21 Continual Improvement, revision 10, January 19, 2021
-------------------	--------------------------------------------------------------

Details: Procedure E21 reviewed and accepted. Examples of Corrective Actions, Preventive Actions and Best Management Practices reviewed included:

- CAR # 2020-001 – flooding occurred during routine hydrant flushing activity – location flagged for future flushing so water can be sent in a different direction
- CAR # 2020-002 – Lindsay HAA running annual average above limits – pilot being planned to alter treatment process to address
- CAR # 2020-003 – Lindsay DWS loss of pressure in system – caused by work being done on a park irrigation system which caused air bubble
- CAR # 2021-002 – Norland DWS low system pressure due to watermain leak on private property

Audit Report

Best Management practices possibilities are described in Appendix QMS E8 Ap 01 Risk Assessment Rating & Best Management Practices, rev. 4, June 25, 2018 however no specific BMPs have been identified.

Opportunities for Improvement:

- Consider keeping CARs open until all relevant information related to the incident is received and documented
- Consider further engagement with Management and front-line staff for identification of Best Management Practices

Details regarding the personnel interviewed and objective evidence reviewed are maintained on file at SAI Global.

This report was prepared by:

Paul Cartlidge
SAI Global Management Systems Auditor

The audit report is distributed as follows:

- SAI Global
- Operating Authority
- Owner
- MOECC

Notes

Copies of this report distributed outside the organization must include all pages.