

Audit Report

Re Accreditation Audit for

Ontario Clean Water Agency for the City of Kawartha Lakes

1634181-02

Audited Address: 322 Kent Street, Lindsay, Ontario, CAN, K9V 5R8

Start Date: May 25, 2021 End Date: May 28, 2021

Type of audit - Verification Audit via Remote Technology

Issue Date: May 28, 2021

Revision Level: *Final*

BACKGROUND INFORMATION

SAI Global conducted an audit of Ontario Clean Water Agency for the City of Kawartha Lakes beginning on May 25, 2021 and ending on May 28, 2021 via Remote Technology 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: City of Kawartha Lakes

Operating Authority: Ontario Clean Water Agency

Owner: City of Kawartha Lakes

Population Served: 11665

Activities: Treatment

Drinking Water Systems

- 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)
- Manorview Drinking Water System (license # 141-118)
- Mariposa Estates Drinking Water System (license # 141-117)
- Norland Drinking Water System (license # 141-103)
- Omeme Drinking Water System (license # 141-108)
- Pinewood Drinking Water System (license # 141-110)
- Pleasant Point Drinking Water System (license # 141-113)
- 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): 3.25

Audit Team Member(s): 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

Verification Audit via Remote Technology:

An audit utilizing Remote Technology (Webex online meeting for interviews, document review, tour of facilities, e-mail of documents, photographs) 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: OCWA transitioned their Hub office from Bobcaygeon to Lindsay at the request of the City in 2019. 2 systems previously operated by OCWA (Sonya Village and Manilla) for the Treatment portion are now being operated by the City as of March 2021.

EXECUTIVE OVERVIEW

Based on the results of this 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 continued 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 # 5 - Consider requesting a Certificate of Destruction from the shredding company for any record destruction being performed.
- Element # 17 – Consider adjusting SOP wording around making adjustments to turbidity analysers based on hand-held device readings

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	OFI
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	Conforms
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
18. Emergency Management	Conforms
19. Internal Audits	Conforms
20. Management Review	Conforms
21. Continual Improvement	Conforms
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:	City of Kawartha Lakes Multi Facility Operational Plan OP-01 Quality & Environmental Management System, rev. 1, 07-Apr-21
Details: Documented Quality Management System described in the City of Kawartha Lakes Multi Facility Operational Plan. Reviewed and accepted.	

DWQMS Reference:	2 Quality Management System Policy
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-02 Quality & Environmental Management System Policy, rev. 0, 31-Aug-18
Details: Policy Statement describes the Quality Management System – reviewed and accepted. Policy statement was revised and approved by OCWA Board of Directors on April 6, 2016. Reviewed and accepted.	

DWQMS Reference:	3 Commitment and Endorsement
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-03 Commitment and Endorsement, rev. 0, 31-Aug-18
Details: Appendix OP-03A contains written endorsement of the Operational Plan signed by OCWA representatives in October 2020 and City of Kawartha Lakes Manager of Environmental Services and Director of Public Works in November 2020. Reviewed and accepted. Through interviews of staff and observations via Webex and documents pertaining to the other requirements of the DWQMS, Top Management has demonstrated evidence of the commitment to the Quality Management System.	

DWQMS Reference:	4 Quality Management System Representative
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-04 Quality & Environmental Management System (QEMS) Representative, rev. 0, 31-Aug-18
Details: The role of QEMS Representative for the CKL DWS is shared between the Kawartha Hub Process and Compliance Technicians (PCT). The Safety, Process and Compliance Manager will act as an alternate QEMS Representative when required. Reviewed and accepted. Through interviews of staff and observations via Webex and documents, the QMS rep maintains procedures needed for the QMS, management reports, training of personnel and promotion of the QMS.	

DWQMS Reference:	5 Document and Record Control
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-05 Document and Records Control, rev. 13, 31-Aug-18
Details: Procedure OP-05 Document and Records Control Procedure contains instructions for documents and records control. Reviewed and accepted. File locations on the OCWA server viewed and updates made to Disinfection of Drinking Water System Components Form, rev. 1 reviewed. Server is backed up daily (viewed records for May 2021). On-site procedure and record storage locations viewed and records are adequately protected in the Treatment Plant. Hard copy record destruction is being completed according to retention periods specified in OP-05 (viewed entries on Record Retention Log for August 2019)	
Opportunity for Improvement – Consider requesting a Certificate of Destruction from the shredding company for any record destruction being performed.	

DWQMS Reference:	6 Drinking Water System
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-06 Drinking Water System, rev. 1, 07-Apr-21 and associated system descriptions
<p>Details: Contents of Drinking Water System Descriptions reviewed and accepted for all systems including:</p> <ul style="list-style-type: none"> • OP-06A Birchpoint Estates Drinking Water System Description, revision 7, 08-Apr-21 • OP-06B Bobcaygeon Drinking Water System Description, revision 12, 16-Apr-21 • OP-06C Canadiana Shores Drinking Water System Description, revision 8, 08-Apr-21 • OP-06D Fenelon Falls Drinking Water System Description, revision 12, 15-Apr-21 • OP-06E Janetville Drinking Water System Description, revision 7, 08-Apr-21 • OP-06F Kings Bay Drinking Water System Description, revision 8, 08-Apr-21 • OP-06G Kinmount Drinking Water System Description, revision 9, 15-Apr-21 • OP-06H Manorview Drinking Water System Description, revision 10, 08-Apr-21 • OP-06I Mariposa Estates Drinking Water System Description, revision 8, 08-Apr-21 • OP-06J Norland Drinking Water System Description, revision 9, 15-Apr-21 • OP-06K Omemee Drinking Water System Description, revision 8, 08-Apr-21 • OP-06L Pinewood Drinking Water System Description, revision 9, 08-Apr-21 • OP-06M Pleasant Point Drinking Water System Description, revision 10, 08-Apr-21 • OP-06N Southview Estates Drinking Water System Description, revision 9, 16-Apr-21 • OP-06O Victoria Place Drinking Water System Description, revision 8, 16-Apr-21 • OP-06P Western Trent/Palmina Drinking Water System, revision 9, 16-Apr-21 • OP-06Q Woodfield Drinking Water System Description, revision 7, 08-Apr-21 • OP-06R Woodville Drinking Water System Description, revision 9, 16-Apr-21 <p>Virtual tours via Webex and photographs and interviews with System Operators of the Canadiana Shores, Mariposa Estates, Norland, Pleasant Point, and Omemee Drinking Water Systems matched the System descriptions. In Canadiana Shores, new Well #4 was placed into operation since the Systems Audit was performed and the System Description is in the process of being updated.</p>	

DWQMS Reference	7 Risk Assessment
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-07 Risk Assessment, rev. 10, 18-Nov-20
Details: Procedure OP-07 Risk Assessment reviewed and accepted.	

DWQMS Reference:	8 Risk Assessment Outcomes
Client Reference:	<p>City of Kawartha Lakes Multi Facility Operational Plan OP-07 Risk Assessment, rev. 10, 18-Nov-20</p> <p>City of Kawartha Lakes Multi Facility Operational Plan OP-08 Risk Assessment Outcomes, rev. 1, 08-Apr-21</p>
<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 current as of January 2021 when new 36-month assessments were performed, along with subsequent minor updates. Reviewed and accepted.</p> <ul style="list-style-type: none"> • OP-08A Birchpoint Estates Summary of Risk Assessment Outcomes, revision 7, 16-Apr-21 • OP-08B Bobcaygeon Summary of Risk Assessment Outcomes, revision 16, 16-Apr-21 • OP-08C Canadiana Shores Summary of Risk Assessment Outcomes, revision 12, 16-Apr- 	

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- OP-08D Fenelon Falls Summary of Risk Assessment Outcomes, revision 12, 09-Apr-21
- OP-08E Janetville Summary of Risk Assessment Outcomes, revision 9, 16-Apr-21
- OP-08F Kings Bay Summary of Risk Assessment Outcomes, revision 11, 16-Apr-21
- OP-08G Kinmount Summary of Risk Assessment Outcomes, revision 12, 09-Apr-21
- OP-08H Manorview Summary of Risk Assessment Outcomes, revision 11, 16-Apr-21
- OP-08I Mariposa Estates Summary of Risk Assessment Outcomes, revision 11, 16-Apr-21
- OP-08J Norland Summary of Risk Assessment Outcomes, revision 11, 09-Apr-21
- OP-08K Omemee Summary of Risk Assessment Outcomes, revision 10, 16-Apr-21
- OP-08L Pinewood Summary of Risk Assessment Outcomes, revision 10, 16-Apr-21
- OP-08M Pleasant Point Summary of Risk Assessment Outcomes, revision 11, 16-Apr-21
- OP-08N Southview Estates Summary of Risk Assessment Outcomes, revision 13, 16-Apr-21
- OP-08O Victoria Place Summary of Risk Assessment Outcomes, revision 13, 16-Apr-21
- OP-08P Western Trent/Palmina Summary of Risk Assessment Outcomes, revision 7, 09-Apr-21
- OP-08Q Woodfield Summary of Risk Assessment Outcomes, revision 8, 16-Apr-21
- OP-08R Woodville Summary of Risk Assessment Outcomes, revision 14, 16-Apr-21

Full Risk Assessments performed for all systems in 2021. Risk Assessment information is also reviewed for currency every calendar year during Management Review. Reviewed and accepted.

DWQMS Reference:	9 Organizational Structure, Roles, Responsibility and Authorities
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-09 Organizational Structure, Roles, Responsibility and Authorities, rev. 2, 22-Jul-19
Details: Organizational Structure, Roles, Responsibility and Authorities reviewed are adequately described in the Operational Plan. Reviewed and accepted. Organizational structure as observed during the audit is accurate.	

DWQMS Reference:	10 Competencies
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-10 Competencies, rev. 2, 19-Nov-20
<p>Details: Procedure OP-10 reviewed and accepted.</p> <p>Classifications for each facility are designated by the Ontario Water & Wastewater Certification Office/Ministry of Environment. Operators for each facility must meet the operator classification based on the facility classification. Certifications for operators reviewed for the operators during the audit:</p> <ul style="list-style-type: none"> • Operator CC – Water Treatment class 1 # 98962 exp. April 30, 2024 and Water Distribution and Supply # 99562 exp. Jan 31, 2024 • Operator CN – Water Treatment Class 3 # 14004 exp. Oct 31, 2022 and Water Distribution and Supply # 17737 exp. Jan 31, 2024 <p>All training activities are recorded in the OCWA Training database recording training hours. Training records for 2 Operators reviewed for 2018-2020 including on-site training, health and safety training, external training and DWQMS training. CEU qualified training always includes a competency/testing requirement. Reviewed and accepted.</p> <p>Performance Review serves as a method of verifying an employee's performance against job expectations (reviewed for PCT in 2020)</p>	

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DWQMS Reference:	11 Personnel Coverage
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-11 Personnel Coverage, rev. 12, 19-Nov-20
<p>Details: Procedure OP-11 reviewed and accepted. Operators generally cover the sites on weekdays Monday-Friday 10:00 – 15:30. 24 hours/7 days coverage via SCADA and on-call coverage is provided as well as adequate vacation coverage by other qualified operators employed by OCWA. Operators and on-call schedule for 2021 reviewed and accepted.</p> <p>3 clusters exist within the Kawartha Hub which includes a Senior Operations Manager, PCT, and Operations staff. Senior Operations Managers are responsible for scheduling.</p> <p>Operators are assigned facilities are within the cluster and are dedicated to those facilities. A combined on-call schedule is in place (North, South and Central Clusters). Operators are assigned to specific facilities within Maximo for both maintenance activities and daily operational checks. For on-call activities or vacation coverage, the assigned operator has access to the facility's work orders to complete all activities. Viewed operator assignment for Western Trent/Palmina, facility # 1281 in Maximo.</p> <p>Viewed ORO assignment chart for each cluster.</p>	

DWQMS Reference:	12 Communications
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-12 Communications, rev. 5, 31-Aug-18
<p>Details: Procedure OP-12 reviewed and accepted.</p> <p>Communications activities reviewed included:</p> <ul style="list-style-type: none">• The Owner – during regularly scheduled meetings and through electronic and verbal communications, monthly operations and maintenance meetings, quarterly system reports as well as annual reports on System performance (reviewed monthly report for March 2021 and quarterly report for Q4 2020).• Operating Authority Personnel – through e-mails, monthly meetings with SOMs, monthly meetings with operations staff (viewed for South and North Clusters for March 2021), training programs – verified for 2 operators.• Suppliers – letter to essential suppliers outlining QMS requirements – sent to all essential suppliers in 2019 (reviewed example for Alliance Wireless Communications – local, OCWA sent the letters for corporate contracts in 2019 – viewed for SGS Canada Inc.)• The Public – through the System Owner. Information is posted on the CKL website and complaints are handled either directly by the City or through OCWA – reviewed complaints for 2020:<ul style="list-style-type: none">○ Omemee DWS July 23, 2020 – water is staining fixtures due to high iron. Looking to optimize the sodium silicate dosage.○ Western Trent/Palmina DWS Jan 28, 2021 – sand noted in water – city asked OCWA to flush hydrant and check turbidity level. Could not find any link to the client's complaint. <p>Communication methods reviewed and accepted.</p>	

DWQMS Reference:	13 Essential Supplies and Services
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-13 Essential Supplies and Services, rev. 7, 31-Aug-18
<p>Details: Procedure OP-13 Essential Supplies and Services describes the requirements for contractors, water testing services, calibration services, chemical supplies and process components and the controls placed on these companies. Essential Supplies and Services List,</p>	

13-November 2020 contains a list of all companies. Reviewed and accepted.

Reviewed qualifications for the following essential suppliers which were current and appropriate:

- Chemicals: NSF certified – all suppliers are corporate contracts – when chemicals are delivered, NSF grade is verified on the packing slip and on the chemical container (e.g. Sodium Hypochlorite, Sodium Silicate from Brenntag).
- Laboratory testing: SGS Lakefield (laboratory testing – viewed CALA certificate exp. Sept 2023).
- Calibration services: Franklin Empire – long-term supplier with experience handling equipment according to manufacturer's recommendations. Company is also certified to ISO 9001:2015

DWQMS Reference:	14 Review and Provision of Infrastructure
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-14 Review and Provision of Infrastructure, rev. 4, 31-Aug-18
<p>Details: Procedure OP-14 reviewed and accepted.</p> <p>A Capital and Major Maintenance Recommendations report is prepared by OCWA and sent to the System Owner for input (2021-2030 report reviewed). Report details recommendations for 10-year period. Links to Risk Assessment Outcomes are included in the summary. Plan and accompanying letter were sent to the System Owner in June 2020, quarterly meetings are performed with the City, who create projects and submit POs to OCWA for completing the required work (viewed example PO for Norland DWS Low Lift Pump replacement in Sept 2020).</p>	

DWQMS Reference:	15 Infrastructure Maintenance, Rehabilitation and Renewal
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-15 Infrastructure Maintenance, Rehabilitation and Renewal, rev. 0, 31-Aug-18
<p>Details: Procedure OP-15 reviewed and accepted.</p> <p>Equipment Maintenance is managed through a work order system (Maximo). Sampled entries from maintenance records for the following equipment:</p> <ul style="list-style-type: none"> • Pleasant Pont UV Systems 1 0000208592 and System 2 0000208593 – monthly verification with reference sensor and 6-month inspection by outside contractor 2021 • Pleasant Point Chlorine Injection Pump 0000277508 – monthly inspection 2021 • Pleasant Point Back-up Generator – monthly tests on record maintained at pumphouse and annual service by outside contractor 2020 • Omemee Back-up Generator – monthly tests on record maintained at pumphouse and annual service by outside contractor 2020 • Omemee Sodium Silicate Injection Pump 0000295724 – monthly inspection 2021 • Omemee Chlorine Injection Pump 0000277516 – monthly inspection 2021 • Omemee Alarm Dialer 0000291280 - monthly Testing 2021 • Canadiana Shores Back-up Generator – monthly tests on record maintained at pumphouse and annual service by outside contractor 2020 • Canadiana Shores Filter System 0000208922 – annual Inspection and Filter replacement 2020 • Norland Intake Pipe inspection 2016 • Norland Back-up Generator – monthly tests on record maintained at pumphouse and annual service by outside contractor 2020 • Norland Filter media replacement 2015 • Norland Clearwell inspection and cleaning 2019 • Norland sludge pumpout (done twice per year – last done Nov 2020) 	

- Mariposa Estates Nitrate Removal system 0000208629 – corrective maintenance by outside contractor
- Mariposa Estates Back-up Generator – monthly tests on record maintained at pumphouse and annual service by outside contractor 2020
- Mariposa Estates Chlorine Injection Pump 0000277518 – monthly inspection 2021

The Owner is provided with a summary of maintenance activities through monthly and annual reports (reviewed for Q1 2021) – statistics for completion of work orders for all systems is included in the report. Effectiveness of the maintenance program is monitored by the Operations Manager utilizing a dashboard in Maximo which indicates completion of work orders. A long-term forecast of major infrastructure, rehabilitation and renewal activities is captured in the 5-year Capital and Major Maintenance Recommendations report sent to the system owner.

DWQMS Reference:	16 Sampling, Testing and Monitoring
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-16 Sampling, Testing and Monitoring, rev. 7, 15-Apr-20
<p>Details: Procedure OP-16 reviewed and accepted. Sampling Calendars describe the specific parameters to be monitored (reviewed for all systems).</p> <p>Reviewed log book entries and Daily Sheets with on-site checks at the Canadiana Shores, Mariposa Estates, Norland, Pleasant Point, and Omemee Drinking Water Systems for May 2021.</p> <p>Reviewed laboratory testing reports for Canadiana Shores, Mariposa Estates, Norland, Pleasant Point, and Omemee Drinking Water Systems including bacterial testing, Nitrates, THMs, HAAs Schedule 23/24, Sodium, Fluoride, Suspended Solids as per the frequency described in the Sampling Calendars for those facilities for 2020/2021. All testing is being performed at the specified frequency.</p> <p>Annual reports sent to the System Owner contain a summary of all sampling, testing and monitoring results.</p>	

DWQMS Reference:	17 Measurement and Recording Equipment Calibration and Maintenance
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-16 Measurement and Recording Equipment Calibration and Maintenance, rev. 3, 31-Aug-18 Online Analyzer Calibration/Verification and Adjustment SOP (Regulatory Chlorine and Turbidity Analyzers), rev. 0, 20-Sep-16
<p>Details: Procedure OP-17 reviewed and accepted.</p> <p>Reviewed equipment calibration records for the following equipment used for the Drinking Water Systems:</p> <p>Handheld analysers for chlorine, turbidity and pH are calibrated in-house annually with external standards, records reviewed including:</p> <ul style="list-style-type: none"> • 2100P Turbidimeter 0000280450 cal. July 23/20 • Pocket II Colorimeter 0000280495 cal. July 23/20 • 2100Q Turbidimeter 0000192937 cal. July 23/20 • Pocket Pro pH meter 0000334029 cal. July 23/20 • DR300 Pocket Colorimeter 0000305876 – new unit received with manufacturer's calibration • DR890 Colorimeter 0000291268 cal. July 8/20 • 2100P Turbidimeter 0000280448 cal. July 8/20 • 2100Q Turbidimeter 0000280457 cal. July 23/20 • Pocket II Colorimeter 0000280454 cal. July 23/20 	

DWS plant/online monitoring equipment calibrated annually by a qualified external contractor:

- Pleasant Point Raw Water Well #1 Flow meter 0000208601 cal. 5/11/21
- Pleasant Point Raw Water Well #2 Flow meter 0000208602 cal. 5/11/21
- Pleasant Point Turbidity Analyser 0000208595 cal. 5/11/21
- Pleasant Point Treated Water Flow Meter 0000204899 cal. 5/11/21
- Pleasant Point Chlorine Analyser 0000192808 cal. 5/11/21
- Pleasant Point Datalogger 0000346013 cal. 5/11/21
- Omemee Raw Water Flow Meter 0000158940 cal. 5/11/21
- Omemee Treated Water Flow Meter 0000158944 cal. 4/27/21
- Omemee Turbidity Analyser 0000295625 cal. 4/27/21
- Omemee Chlorine Analyser 0000192862 cal. 4/27/21
- Omemee Datalogger 0000277510 cal. 4/27/21
- Canadiana Shores Train 1 Turbidity Analyser 0000295593 cal. 5/4/21
- Canadiana Shores Train 2 Turbidity Analyser 0000295594 cal. 5/4/21
- Canadiana Shores Raw Water Flow Meter 0000158990 cal. 5/4/21
- Canadiana Shores Backwash flow meter 0000277567 cal. 5/4/21
- Canadiana Shores Treated Water Flow Meter 0000158991 cal. 5/4/21
- Canadiana Shores Chlorine Analyser 0000105642 cal. 5/4/21
- Norland Train 1 Raw Water Flow Meter 0000208367 cal. 5/20/21
- Norland Train 2 Raw Water Flow Meter 0000208368 cal. 5/20/21
- Norland Train 1 Turbidity Analyser 0000306021 cal. 5/20/21
- Norland Train 2 Turbidity Analyser 0000306020 cal. 5/20/21
- Norland Chlorine Analyser 0000208381 cal. 5/20/21
- Norland Treated Water Flow Meter 0000291378 cal. 5/20/21
- Norland Datalogger 0000208408 cal. 5/20/21
- Mariposa Estates Raw Water Flow Meter 0000208628 cal. 5/11/21
- Mariposa Estates Turbidity Analyser 0000192852 cal. 5/11/21
- Mariposa Estates Chlorine Analyser 0000192866 cal. 5/11/21
- Mariposa Estates Datalogger 0000277520 cal. 5/11/21
- Mariposa Estates Treated Water Flow Meter 0000158999 cal. 5/11/21
- Mariposa Estates System Pressure Transmitter 0000291117 cal. 5/11/21

Calibration reports for the above had not yet been sent as of the date of the audit. Calibration reports from 2020 were reviewed for all items, which were acceptable and all readings in tolerance for as found/as left.

Chlorine and Turbidity Analysers are verified against handheld units and adjusted as necessary with the results recorded in the facility log book.

UV Reference Sensor 0000346018 used for verification of UV Transmittance at Pleasant Point – purchased with external calibration from manufacturer in 2020.

Opportunity for Improvement - Consider adjusting SOP wording around making adjustments to turbidity analysers based on hand-held device readings

DWQMS Reference:	18 Emergency Management
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-18 Emergency Management, rev. 7, 19-Nov-20
<p>Details: General requirements are described in procedure OP-18 and the OCWA Emergency Response Plan. Reviewed and accepted.</p> <p>The following specific contingency plans have been established:</p> <ul style="list-style-type: none"> • CP-01 Spill Response, rev. 3, 31-Jan-20 	

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- CP-02 Critical Injury, rev. 3, 31-Jan-20
- CP-03 Critical Shortage of Staff, rev. 3, 31-Jan-20
- CP-04 Loss of Service, rev. 1, 31-Jan-20
- CP-05 Unsafe Water, rev. 3, 31-Jan-20
- CP-06 Security Breach, rev. 1, 31-Jan-20

An emergency communication protocol and an up-to-date list of emergency contacts is established specific to the City of Kawartha Lakes. Emergency procedures are reviewed and/or tested on an annual basis. Reviewed and accepted. Access to Emergency Response Plan verified at each DWS viewed during the audit. Most recent Emergency Response Test exercise was performed for CP-03 Critical Shortage of Staff on 2020-09-10 for North Cluster, 2020-10-08 for Central Cluster and 2020-09-03 for South Cluster to review the pandemic situation and new COVID related procedures.

Additional Contingency Plans specific to COVID-19 are in place to address specific emergency situations around the pandemic (supplemental to Critical Shortage of Staff and pandemic screening, facility requirements and PPE.

DWQMS Reference:	19 Internal Audits
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-19 Internal QEMS Audits, rev. 6, 29-May-20
Details: Procedure OP-19 reviewed and accepted. Each year's internal audit includes a sample of 4 DWS to be reviewed in detail. Internal audit schedule exists for CKL, includes a 5-year plan to cover all systems. Most recent internal audit was performed in October 2020 including Bobcaygeon, Canadiana Shores, Mariposa Estates and Woodfield DWS. Internal Audit performed by an OCWA PCT not associated with the CKL clusters. No non-conformances and 1 Opportunity for Improvement were identified. Follow-up on the OFI performed through Management Review.	

DWQMS Reference:	20 Management Review
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-20 Management Review, rev. 5, 31-Aug-18
Details: Procedure OP-20 captures all PLAN requirements from section 20 of the DWQMS. Management Reviews are conducted a minimum of once every calendar year. Reviewed and accepted. Many standing items from monthly meetings with CKL and included as inputs to the Management Review. Most recent Management Review was performed on November 25, 2020. Minutes included all required Management Review agenda items. Action items are noted in the minutes and assigned to a staff member with a due date for completion (e.g. filter performance optimization in Bobcaygeon). Management Review meeting minutes and supporting reports are sent via e-mail to the City on December 24, 2020 (sent to Supervisor, Water & Wastewater). Management Review Implementation Action Plan is created to monitor all action items as needed or as action items are completed.	

DWQMS Reference:	21 Continual Improvement
Client Reference:	City of Kawartha Lakes Multi Facility Operational Plan OP-21 Continual Improvement, rev. 1, 29-May-20
Details: Procedure OP-21 reviewed and accepted. Corrective Actions, Preventive Actions and Best Management Practices are recorded on the Summary Table of Action Items. Examples reviewed included: <ul style="list-style-type: none">• Corrective Action 2021-5: North Cluster 72 hour trend reviews not completed over long weekend from April 2 – 5, 2021. Root Cause Analysis performed and determined no	

reminders exist for staff to complete during long weekends. Reminder now added to Outlook calendar for on-call staff

- Corrective Action 2021-2: Bobcaygeon Filter 1 NTU analyzer had equipment failure (sensor missing error) resulting in loss of continuous monitoring. Root cause determined to be sensor failure but also that signal was not being generated through SCADA. Signal communication updated through SCADA for Bobcaygeon and all other facilities utilizing a similar configuration
- Corrective Action 2020-9: From MECP inspection - Production well not maintained in a manner sufficient to prevent entry into the well of surface water and other foreign materials. Root Cause determined to be a new well had not been completely secured by the contractor (well not yet in service). SOP for monthly well inspections to be updated (in progress)
- Best Management Practice 2021-4: More detailed documentation on disinfection of water system components – form updated to include more detail on disinfection procedure and ability to record chlorine residuals.

A more robust root cause analysis is being performed as corrective action from the NCR issued at the 2020 SAI Global surveillance audit. Corrective Action taken in response to NCR is verified as effective.

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

This report was prepared by:

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SAI Global Management Systems Auditor

The audit report is distributed as follows:

- SAI Global
- Operating Authority
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Notes

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