

# Audit Report

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Re-accreditation for

The Nation Municipality

ACTY-2023-640718

Audited Address: 958 Route 500 West, Casselman, Ontario, K0A  
1M0, Canada

Start Date: December 16, 2024. End Date: December 17, 2024.

Type of audit - Re-accreditation

Issue Date: December 24, 2024.

Revision Level: *Final*



## Audit Report

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### BACKGROUND INFORMATION

Intertek - SAI Global conducted an audit of The Corporation of the City of Markham beginning on December 16, 2024 and ending on December 17, 2024 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.

Intertek - SAI Global audits are carried out within the requirements of Intertek - 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. Intertek - 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, Intertek - 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 Intertek - SAI Global Terms and Conditions.

This report has been prepared by Intertek - SAI Global Limited (Intertek - SAI Global) in respect of a Client's application for assessment by Intertek - 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 Intertek - SAI Global at the time of the audit, based on sampling of evidence provided and within the audit scope. Intertek - 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. Intertek - 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.

<b>Standard:</b>	DRINKING WATER QUALITY MANAGEMENT STANDARD VERSION 2 - 2017.	
<b>Applicable codes:</b>	DWQSM V2.0	
<b>Scope of Certification:</b>	Drinking Water System	
<b>Drinking Water System Owner:</b>	The Nation Municipality	
<b>Operating Authority:</b>	The Corporation of the City of Markham	
<b>Population Services:</b>	5,214	
<b>Activities:</b>	Treatment and Distribution	
<b>Drinking Water Systems</b>	Limoges DWS	
	St-Isidore distribution system	

<b>Total audit duration:</b>	<b>Person(s):</b> 1	<b>Day(s):</b> 1.0
<b>Audit Team Member(s):</b>	Team Leader James Pang	

**Other Participants:**

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### 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 Intertek - 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 Intertek - 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 Intertek - SAI Global prior to commencement of follow-up activities as required. Follow-up action by Intertek - 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 Intertek - 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 Intertek - 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 Intertek - 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 Intertek - 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. Intertek - 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 Intertek - 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
- Intertek - SAI Global Accreditation Program Handbook

## **Confidentiality and Documentation Requirements**

The Intertek - SAI Global stores their records and reports to ensure their preservation and confidentiality. Unless required by law, the Intertek - 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 Intertek - SAI Global will provide audit and corrective action reports to the Ontario Ministry of the Environment. For more information, please refer to the Intertek - SAI Global Accreditation Program Handbook.

As part of the Intertek - SAI Global Terms, it is necessary for you to notify Intertek - 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 Intertek - SAI Global Accreditation Program Handbook.

## **Review of any changes**

Changes to the company since last audit include:

## **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 Intertek - SAI Global review team.

### **Opportunities for Improvement:**

The following opportunities for improvement have been identified.

- Element 2
- Element 7
- Element 13
- Element 17
- Element 18

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

### **Management System Documentation**

The management systems operational plan(s) 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 company 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	<b>OFI</b>
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	<b>OFI</b>
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	<b>OFI</b>
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	<b>OFI</b>
18. Emergency Management	<b>OFI</b>
19. Internal Audits	Conforms
20. Management Review	Conforms
21. Continual Improvement	Conforms
<b>Major NCR #</b>	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 in a corrective action request has not been remedied.
<b>Minor NCR #</b>	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.
<b>OFI</b>	Opportunity for improvement. Conforms to the requirement, but there is an opportunity for improvement.
<b>Conforms</b>	Conforms to requirement.
<b>NANC</b>	Not applicable/Not Covered during this audit.
<b>****</b>	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:	Element 1 of the OP.
Details: Conformance All 21 elements were addressed in the Operational Plan, Rev 6, dated October 24, 2024.	

DWQMS Reference:	2 Quality Management System Policy
Client Reference:	Element 2 of the OP.
Details: <b>OFI</b> Sebastian C. was satisfactorily interviewed regarding his understanding of the QMS policy. The QMS policy is available to the personnel of the Operating Authority through a displayed copy at the water treatment plant. For the Owner, it is accessible in the Operational Plan (OP) and on the municipality's website, making it available to members of the public. As an improvement to enhance its visibility for suppliers of essential products and services, management could consider periodically sending them a copy of the QMS policy.	

DWQMS Reference:	3 Commitment and Endorsement
Client Reference:	Element 3 of the OP.
Details: Conformance Endorsed by Top Management (Director of W&WW) on October 21, 2024. Endorsed by the Owner, as signed by the Mayor on March 27, 2023, and by the CAO on October 22, 2024.	

DWQMS Reference:	4 Quality Management System Representative
Client Reference:	Element 4 of the OP.
Details: Conformance It was noted that the QMS Representative position had been reassigned to the Manager of W&WW Services, while the Director of W&WW remains as the Top Management (TM) of the Operating Authority. This change was recommended in the Opportunity for Improvement (OFI) from the Systems Audit.	

DWQMS Reference:	5 Document and Record Control
Client Reference:	Element 5 of the OP
Details: Conformance All documents and records required during the audit were promptly provided whenever requested during the audit.	

DWQMS Reference:	6 Drinking Water System
Client Reference:	Element 6 of the OP.
Details: Conformance The description of the water treatment process was verified through a visit to the water treatment	

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plant. Other facilities visited and verified included the “garage” where chemicals spares were maintained, as well as a premise housing a online chlorine analyser for the distribution system.

DWQMS Reference	7 Risk Assessment
Client Reference:	Element 7 of the OP
<b>Details: OFI</b> It was noted that the Operational Plan had been revised to clarify the description of the annual verification of assumptions and information used in the risk assessment. The most recent 36-month risk assessment was conducted on August 1, 2023, while the annual verification of assumptions and information was last performed on July 18, 2024. As a future improvement to the risk assessment process, management may consider blanking out the numbers in the existing risk assessment outcome table to prevent assessors from being influenced by previous results.	

DWQMS Reference:	8 Risk Assessment Outcomes
Client Reference:	Element 8 of the OP
<b>Details: Conformance</b> Records of deviations from January to December 2024 were reviewed. Minor or insignificant occurrences were recorded but not formally reported. Significant events were verbally reported during the daily morning and evening meetings involving the director, manager, senior operator, and operators. Examples of such reports, as documented in the logbooks, include entries by Gabriel F. on September 8, 2024, and Jonathan D. on September 9, 2024.	

DWQMS Reference:	9 Organizational Structure, Roles, Responsibility and Authorities
Client Reference:	Element 9 of the OP.
<b>Details: Conformance</b> As described in element 9 of the OP.	

DWQMS Reference:	10 Competencies
Client Reference:	Element 10 of the OP.
<b>Details: Conformance</b> It was noted that the Opportunity for Improvement (OFI) to delegate personnel to track and monitor that operational staff maintain appropriate training hours/units for license renewal or upgrades had been implemented, with the manager designated as the responsible personnel. The licenses of seven operational staff members were reviewed and found to be in order. The manager responsible for tracking was able to provide records of Continuing Education Units (CEUs) and training. Specifically, the record of Alan D. was reviewed and confirmed to be ready for renewal in April 2025.	

DWQMS Reference:	11 Personnel Coverage
Client Reference:	Element 11 of the OP
<b>Details: Conformance</b> The distribution low-pressure alarm was triggered, notifying the on-call operator (Gabriel F.).	



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Online activity indicated that he was actively investigating the situation.

DWQMS Reference:	12 Communications
Client Reference:	Element 12 of the OP.
Details: Conformance	
<p>Noted that the section had been revised to clarify that the Top Management (TM), specifically the Director, is involved in the communications described in this section. Sample communications between the Top Management and four parties were satisfactorily reviewed:</p> <ul style="list-style-type: none"><li>• With the Owner: An email dated August 26, 2024, from the Director to the Owner (Deputy Treasurer) regarding the long-term infrastructure plan was reviewed.</li><li>• With staff of the OA: A staff meeting held on September 3, 2024, between the Director and the water staff was reviewed.</li><li>• With suppliers: An email dated March 26, 2024, from Capital Controls (supplier of the SCADA system) to the Director regarding communication standards was reviewed.</li><li>• With the public (through the Owner): An email dated November 5, 2024, from the Director to the Communications and Marketing Coordinator regarding water and sewer matters for the site web was reviewed.</li></ul>	

DWQMS Reference:	13 Essential Supplies and Services
Client Reference:	Element 13 of the OP.
Details: <b>OFI</b>	
<p>Several delivery documents were reviewed for records of product quality verification. Specifically, a Brenntag delivery of sodium hypochlorite on December 6, 2024, was examined. The product's Certificate of Analysis (CoA) included the matching lot number against the Bill of Lading (BoL). Although the BoL was signed by an operator (Jonathan D.), there was no documented record of verifying the quality of the sodium hypochlorite. Management should consider enhancing the verification process by clearly indicating on both the CoA and BoL the verification of the lot number, NSF certification, product test results, and the date of production.</p>	

DWQMS Reference:	14 Review and Provision of Infrastructure
Client Reference:	Element 14 of the OP.
Details: Conformance	
<p>A record of the infrastructure review conducted by the Director and Manager of W&amp;WW, documented as Appendix 4 of the management review minutes, was reviewed. The review was found to be generally in accordance with established procedures.</p>	

DWQMS Reference:	15 Infrastructure Maintenance, Rehabilitation and Renewal
Client Reference:	Section 15 of the OP.
Details: Conformance	
<p>A spreadsheet of sewer and water data for 2025, prepared for the long-term plan of major infrastructure, was reviewed and updated as of 2024. The spreadsheet included major</p>	

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infrastructure components such as flow meters, a water tower, pumping stations, a reservoir, a treatment plant, and water mains, with projections extending from 2025 to 2039. Comments by the Director of W&WW, noted in the spreadsheet, included costing forecasts for the treatment plant, pumping stations, and reservoir. The report was submitted to the Owner (Deputy Treasurer) by the Director on August 26, 2024.

DWQMS Reference:	16 Sampling, Testing and Monitoring
Client Reference:	Element 16 of the OP.
<b>Details: Conformance</b>  Residual chlorine levels at the treatment plant were reviewed for the period from July to December 2024 and found to average approximately 2.3. The locations for water sampling within the distribution system were reviewed and found to be acceptable and generally in conformance.	

DWQMS Reference:	17 Measurement and Recording Equipment Calibration and Maintenance
Client Reference:	Element 17 of the OP.
<b>Details: OFI</b>  Records of online chlorine analyzer verifications at the treatment plant from January to December 2024 were reviewed. It was noted that different operators were adjusting the online chlorine analyzer based on varying differences between the online and handheld readings, leading to inconsistencies. Management should review SOP-055 to ensure consistency among operators in this process.  Additionally, it was observed that the treatment plant colorimeter and handheld colorimeters were regularly calibrated, supplemented by an annual third-party calibration. However, the calibration records only included the calibration date, with no further details provided. As an improvement, management may consider enhancing record-keeping by documenting all calibration readings, the personnel performing the calibration, details of the standard used, and its expiry date.	

DWQMS Reference:	18 Emergency Management
Client Reference:	Element 18 of the OP
<b>Details: OFI</b>  A review of the July 18, 2024, emergency test, which involved a simulated public report of vandalism to the aeration basin, was conducted. All operators were individually tested for their responses, and their actions were recorded by the manager.  Records of weekly and monthly generator tests at the Forest Park Booster Station were reviewed and found to be generally in conformance.  Inventories of water treatment spares and watermain repair materials were reviewed and found to be generally in conformance. To ensure an adequate supply of spare repair accessories, management may consider delegating the responsibility to the On-Site Incident Commander (OIC) for repair work. This would ensure that replacement parts are ordered before the finalization of the watermain break report for each incident.  Management may consider conducting a trial run of the Standard Operating Procedure (SOP) for Intrusion and Vandalism to test its adequacy.	

DWQMS Reference:	19 Internal Audits
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Client Reference:	Element 19 of the OP.
Details: Conformance	
An internal audit report prepared by Acclaims on October 1, 2024, was reviewed. Both auditors, Brigitte Roth and Anita Petrov, were trained and independent of the audited activities. The audit addressed all 21 elements, and objective evidence was documented in the audit checklists.	

DWQMS Reference:	20 Management Review
Client Reference:	Element 20 of the OP.
Details: Conformance	
A record of a management review held on September 26, 2024, was reviewed. All prescribed agenda items were addressed. No action items were identified following this review. The Director of W&WWW attended the meeting.	

DWQMS Reference:	21 Continual Improvement
Client Reference:	Element 21 of the OP.
Details: Conformance	
A summary of the Continual Improvement Report, with the last entry dated November 7, 2024, was reviewed and found to be generally in conformance.	

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

This report was prepared by:

*JKHPang*

James Pang

Intertek - Intertek - SAI Global Management Systems Auditor

The audit report is distributed as follows:

- Intertek - Intertek - SAI Global
- Operating Authority
- Owner
- MECP

## Notes

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