

## **Corrective Actions Report**

The Corporation of the Municipality of Kincardine 1475 Concession 5 Kincardine, Ontario N2Z 2X6 CAN

## C0121370

## Audit Type

DWQMS Verification Audit 12-AUG-2019 - 14-AUG-2019

Registration

Ontario's Drinking Water Quality Management Standard Version 2 (Exp Date: 10-OCT-2019)

Corrective Action	J3181060-1	Туро	MINOR	
		Туре	-	
Standard & Clause	DWQMSV2, Esstential Supplies & Services		Donna Hardman	
Auditor Name	Rose Johnson	Car Status	APPROVED	
Statement of Requirement	13. Essential Supplies and Services     PLAN – The Operational Plan shall:			
	<ul> <li>a) identify all supplies and services essential for the delivery of safe drinking water and shall state, for each supply or service, the means to ensure its procurement, and</li> <li>b) include a procedure by which the Operating Authority ensures the quality of essential supplies and services, in as much as they may affect drinking water quality.</li> </ul>			
	DO – The Operating Authority shall implement and conform to the procedure.			
	Also Municipality of Kincardine Operational Plan, Rev. 6, September 2017 13. Essential Supplies and Services 'A list of all supplies and services deemed essential for the production and delivery of safe water can be found in Appendix F Companies and contractors listed in Appendix F are notified of the Municipality's QMS and applicable requirements'			
Statement of Nonconformity	Processes to ensure quality of esser	ntial supplies and s	ervices are not fully effective.	
Objective Evidence	Essential Supplies and Services List (Appendix F), Rev. 25, December 10, 2018 states that Calibration services for water quality instruments and flow meters are provided by Flowmetrix Technical Services. A review of 2019 calibration records indicates that Indus Control is the current service provider for flowmeter calibrations, and Nichol Water Services is the current provider of water quality instrument calibrations. There is no evidence available to demonstrate that the above two calibration service providers have been notified of the Municipality's QMS requirements.			
Location of Finding	Essential Supplier Records / Calibra	tion Records		
Changed Date	14-OCT-2019			
Issue Date	14-AUG-2019			
Due Date	30-SEP-2019			
CA Plan	Revise the Essential Services document to include the new service providers and send a QMS information package to all new suppliers and service providers since the previous communication with essential suppliers/service providers. Revise QMS007 to clarify new supplier/service provider procedures.			
PA Plan				
Containment Plan	Review the current Essential Suppliers & Service Providers document and ensure that it is up to date. Provide an information package to any suppliers or service providers that have not received details about our QMS.			
RCA Description	During the annual evaluation of suppliers it was not identified that the current service provider was substandard. The Supervisor explored alternatives to our current service provider when he became aware of two other companies that might be able to provide comparable services at a cheaper price. QMS007 Essential Supplier and Service Provider Evaluation does not address how new providers will be handled.			
Completed Date	26-SEP-2019			
Completed By	Donna Hardman			
Reviewer Name	Rose Johnson			
Reviewer comments	2019-10-14: APPROVED - Reviewed containment, root cause and corrective action plan, as well as updated QMS007 Essential Supplier and Service Provider Evaluation Procedure (Rev. 3, September 25, 2019), and updated Essential Supplies and Services Procurement Information (Rev. 27, September 5, 2019) which now references Indus Control and Nichol Water Services. Accepted as submitted. Implementation effectiveness to be evaluated at the next audit. RJ.			
Attachments	Descr: Essential Suppliers Pkg Aug 2019 (Date: 26-SEP-2019) Descr: QMS007 Essential Suppliers and Service Providers Evaluation Rev 3 (Date: 26- SEP-2019) Descr: Essential Suppliers and Service Providers Procurement List Rev 27 (Date: 26- SEP-2019)			

Standard & Clause	DWQMSV2, Measurement & Recording Equipment, Calibration & Maintenance	Discussed with	Donna Hardman	
Auditor Name	Rose Johnson	Car Status	APPROVED	
Statement of Requirement	17. Measurement and Recording Equipment Calibration and Maintenance PLAN – The Operational Plan shall document a procedure for the calibration and maintenance of measurement and recording equipment.			
	<ul> <li>DO – The Operating Authority shall implement and conform to the procedure.</li> <li>Also Municipality of Kincardine SOP031 Armow UV Sensor Reference Check, Rev. 5, July 11, 2018</li> <li>UV Sensors are checked against a reference sensor to confirm the calibration ratio is</li> </ul>			
	less than or equal to 1.2' Municipality of Kincardine Armow UV Sensor Verification Check work order instructions state: 'Complete the UV sensor verification check by following SOP031. Ensure that the Serial			
	Number is correct on the sensor in use and record the Serial Number of the reference sensor used.'			
Statement of Nonconformity	UV sensor verification process is not fully effective.			
Objective Evidence	There is no evidence available to demonstrate that UV sensors (1 & 2) were checked against a reference sensor in March 7, 2019 - records indicate that the current duty sensor 1 (#170327724) was used for the verification, not the reference sensor (#181007634) as required.			
Location of Finding	Further, there is no record available to indicate the reference sensor used for the February 19, 2019 verifications (1 & 2), as required by Municipality of Kincardine procedures. Armow UV Sensor Verification Records			
Changed Date	14-OCT-2019			
Issue Date				
Due Date	14-AUG-2019 30-SEP-2019			
		nlata ta hava a ma	and tany field for recording the	
CA Plan	Revise the Cityworks work order template to have a mandatory field for recording the Reference Sensor Serial Number so that the work order cannot be closed until it is recorded.			
PA Plan				
Containment Plan	Review with operations staff the non-conformance details and the requirement to document the reference sensor number. Review the work orders completed in Cityworks to confirm if the reference sensor serial number has been recorded. Going forward the work orders cannot be closed until this information is recorded. Revise the Cityworks template to include a mandatory field for recording the serial number.			
RCA Description	SOP031 and work order instructions were not followed regarding recording the Reference Sensor Serial Number each time the reference checks were completed. It is not known why these instructions were overlooked. It was noted by the QMS Rep during review of the work orders that information was missing and it was brought up to staff previously but without it being recorded at the time of the verification check, it could not be guaranteed that the correct serial number would be recorded after the checks were completed.			
Completed Date	26-SEP-2019			
Completed By	Donna Hardman			
Reviewer Name	Rose Johnson			
Reviewer comments	2019-10-14: APPROVED - Reviewed containment, root cause and corrective action plan, as well as updated City Works UV Work Oder template. Accepted as submitted. Implementation effectiveness to be evaluated at the next audit. RJ.			
Attachments	Descr: Cityworks UV Verification wor	rk order template (	Date: 26-SEP-2019)	

CAR No	J3181060-3	Туре	MINOR
Standard & Clause	DWQMSV2, Drinking-Water System	Discussed with	Donna Hardman
Auditor Name	Rose Johnson	Car Status	APPROVED

Statement of Deguinement	6. Drinking Water System	
Statement of Requirement	o. Diffking water System	
	PLAN – The Operational Plan shall document, as applicable: a) for the Subject System:	
	i. the name of the Owner and Operating Authority,	
	ii. if the system includes equipment that provides Primary Disinfection and/or Secondary Disinfection:	
	A. a description of the system including all applicable Treatment System processes and	
	Distribution System components,	
	B. a Treatment System process flow chart,	
	C. a description of the water source, including: I. general characteristics of the raw water supply,	
	II. common event-driven fluctuations, and	
	III. any resulting operational challenges and threats.	
	<li>iii. if the system does not include equipment that provides Primary Disinfection or Secondary Disinfection:</li>	
	A. a description of the system including all Distribution System components, and	
	B. a description of any procedures that are in place to maintain disinfection residuals.	
	b) if the Subject System is an Operational Subsystem, a summary description of the	
	Municipal Residential Drinking Water System it is a part of including the name of the	
	Operating Authority(ies) for the other Operational Subsystems. c) if the Subject System is connected to one or more other Drinking Water Systems owned	
	by different Owners, a summary description of those systems which:	
	i. indicates whether the Subject System obtains water from or supplies water to those	
	systems, ii. names the Owner and Operating Authority(ies) of those systems, and	
	iii. identifies which, if any, of those systems that the Subject System obtains water from are	
	relied upon to ensure the provision of safe drinking water.	
	DO – The Operating Authority shall ensure that the description of the Drinking Water	
	System is kept current.	
Statement of Nonconformity	The description of the Drinking Water System is not current	
Objective Evidence	The description of the Armow Drinking Water System in the Municipality of Kincardine Operational Plan (Rev. 6, September 2017) is not current - no reference to Arsenic removal	
	system (added November 2018)	
Location of Finding	Municipality of Kincardine Operational Plan, Rev. 6, September 2017	
Changed Date	14-OCT-2019	
Issue Date	14-AUG-2019	
Due Date	30-SEP-2019	
CA Plan	Remove the system descriptions from the body of the Plan and put them in the Appendix C. Update the Armow system description.	
PA Plan		
Containment Plan	Update the descriptions for each of the systems we operate. Explore options of removing	
	the system description section from the body of the Operational Plan so it can be updated	
	without having to update the entire Plan. Have the system descriptions in the Appendices where it will be reviewed and updated annually.	
RCA Description	It was identified that the Armow system description needed to be updated. It had not been	
	updated yet because it would require a revision of the entire Operational Plan and there	
	were other updates in the Plan to be done which would require more time than the QMS Rep had to complete the job.	
Completed Date	26-SEP-2019	
Completed By	Donna Hardman	
Reviewer Name	Rose Johnson	
Reviewer comments	2019-10-14: APPROVED - Reviewed containment, root cause and corrective action plan,	
	as well as updated Armow System Description (Rev. 1, September 19, 2019) which now	
	references arsenic removal. Accepted as submitted. Implementation effectiveness to be evaluated at the next audit. RJ.	
Attachments	Descr: Appendix C Armow System Description (Date: 26-SEP-2019)	