



Staff Report PW2022-056

Title of Report: PW2022-056 DWQMS External Audit 2022
Department: Public Works
Branch: Water & Wastewater
Council Date: December 21, 2022

Recommendation:

Be it resolved that Council receive Staff Report PW2022-056 for information.

Background:

As per the Ontario Drinking Water Quality Management Standard the Township's Drinking Water Quality Management System (DWQMS) requires an external third-party offsite audit review for two years, and then an on-site audit the third year. On September 1, and 2nd, 2022, NSF International Strategic Registrations (ISR) auditor James Pang conducted an off-site external audit for the Dundalk Drinking Water Quality Management System. Quality Management System (QMS) Representative Cory Henry, Public Works Administrative Assistant Lisa Wilson and Public Works Manager Jim Ellis were available throughout the days' audit to provide responses to the auditor.

Staff Comments:

The NSF auditor identified 1 non-conformance with 1 Minor Corrective Action Request (CAR) for the following:

Element 17- Measurement and Recording Equipment Calibration and Maintenance - The auditor reviewed the calibration certification of 4 portable colorimeters, 2 portable turbidimeters, and 2 online chlorine analyzers at each of the three Dundalk well pumphouses. He reviewed daily verification and calibration records of the handheld colorimeters for accuracy, from March 7 to August 29, 2022. The auditor observed the Calibration Standards kit used for calibration verification had expired in February 2022. (Attachment #1)

A Corrective Action Preventative Action (CAPA) form was submitted to NSF by the QMS rep that outlined the root cause and actions to correct the issue. A column was added to Forms 02,23,33 and 55 to track the Standard Expiry Date to be recorded by operators. Auditor Pang approved the CAR response and closed the minor Corrective Action Request. (Attachment #2)

The NSF auditor recommended 4 Opportunity for Improvement (OFI) for the quality management system.

The 4 OFI's recommended are for:

Element 13- Essential Supplies and Services – The auditor reviewed a list found in section 13 of the Operational Plan (OP) and recommends considering highlighting the supplies and services that are indispensable for the production and delivery of safe drinking water. He also reviewed records for quality verification of sodium hypochlorite from Anchem Sales, bill of lading dated July 25, 2022, Aug 15, 2022, Aug 22, 2022, and recommends considering the following:

1. Receiver to tick off against each quality parameter verified, such as NSF certification, product %, date of manufacture
2. Request for the certificate of analysis (COA) of the product delivered and verify that their batch or lot number, as well as the product quality test result

Element 14 – Review and Provision of Infrastructure – The auditor reviewed the Dundalk Waterworks Infrastructure Program Plan dated August 25, 2022 and concluded the requirement to be in conformance. The auditor recommended that management may consider including the author of the notes and or the participants involved in generating the notes.

Element 17- Measurement and Recording Equipment Calibration and Maintenance – A recommendation to identify and record which of the handheld colorimeters is used in verifying and calibrating the on-line chlorine analyzer and consider flagging the situation whenever the grab sample reading for free Cl is more than 0.05 different from the on-line chlorine analyzer reading, then to adjust the analyzer of the deviation if it persists the following day.

Element 18 – Emergency Management – Consider looking into ways to ensure the well generator is in working condition and to record the ability of the power transfer from the gen set to the well house occurred.

Staff will be discussing and consider implementing some of the OFI recommendations.

NSF ISR issued a re-certification Certificate of Registration for the Township of Southgate Ontario's Drinking Water Quality Management Standard Version 2. (Attachment #3)

Financial Implications:

There is no financial impact or long-term implications with this staff report. The DWQMS audits are included in the Water Operational Budget.

Communications & Community Action Plan Impact:

Goal 5 - Upgrading our "Hard Services"

Action 5: The residents and businesses of Southgate recognize our linear services - roads, bridges, water, and sewer work, for example - to be a fundamental purpose

of municipal government. This infrastructure needs to be serviceable and sustainable so that our businesses and communities can thrive and grow.

Concluding Comments:

Staff recommends that Council receive Staff Report PW2022-056 for information.

Respectfully Submitted,

Dept. Head: *Original Signed By*
Jim Ellis, Public Works Manager

CAO Approval: *Original Signed By*
Dave Milliner, CAO

Attachments:

Attachment #1 – DWQMS External Audit 2022

Attachment #2 – DWQMS CAR Approved

Attachment #3 – NSF ISR Certificate of Registration