

| Agenda Item # | Page # |
|---------------|--------|
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| TO: | CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING OF DECEMBER 9, 2013 |
| FROM: | JOHN LUCAS, P.ENG. DIRECTOR - WATER AND WASTEWATER |
| SUBJECT: | MINISTRY OF THE ENVIRONMENT INSPECTION REPORT FOR THE CITY OF LONDON WATER DISTRIBUTION SYSTEM - 2013 |

RECOMMENDATION

That on the recommendation of the Director - Water and Wastewater, the 2013 Ministry of the Environment Inspection Report for the City of London Water Distribution System **BE RECEIVED** for information by Municipal Council.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

The following reports can be found on the City of London's website at:

<http://www.london.ca/city-hall/meetings/Pages/default.aspx>

“Annual Ministry of Environment Inspection of the City of London Water Distribution System - 2012”, Civic Works Committee, February 4, 2013, Agenda item #2.

“Annual Ministry of Environment Inspection of the City Water Distribution System”, Civic Works Committee, September 10, 2012, Agenda item #3.

BACKGROUND

Municipal drinking water systems in Ontario are held to very high management and operational standards. The Ontario Ministry of the Environment (MOE) ensures that these standards are being met through two separate mechanisms.

For water system management, the MOE developed a Drinking Water Quality Management Standard (DWQMS) which combined elements of existing ISO 9001 and HACCP standards. Municipalities are required to implement and maintain Quality Management Systems (QMSs) that meet the requirements of this standard. Quality Management Systems (QMSs) can be defined as sets of interrelated elements (e.g. policies and procedures) that direct and control the way a facility operates with regard to quality. Conformance to the DWQMS is monitored through internal and external audits of the QMS. Every 3 years, an external accreditation body performs an audit to identify any non-conformities within the QMS, which are then addressed by the municipality.

Staff recently reported to Council that London received its first external audit in 2013. Due to the success of that audit, a 3-year Certificate of Accreditation was issued to the City of London.

Water system operations are governed by provincial regulations, and by the terms and conditions prescribed in MOE-issued Drinking Water Works Permits and Municipal Drinking Water Licences. The MOE performs rigorous annual inspections to ensure that municipalities are operating their water systems in compliance with all applicable legal requirements.

This report outlines the results of the 2013 MOE Inspection, which was conducted between September 24 and November 26, 2013.

| Agenda Item # | Page # |
|---------------|--------|
| | |

DISCUSSION

MOE inspections can be in the form of comprehensive inspections, or focused inspections. The MOE reported that London's Water Distribution System was chosen for a focused inspection because:

"...inspection findings over the past three years were such that the number of violations were minimal or non-existent, there were few or no orders issued to you that were of significance in the maintenance of water potability and there were no deficiencies as defined in O. Reg. 172/03."

The MOE inspection included staff interviews and facility inspections, as well as a review of operating procedures, water analysis reports, operational records, and staff certification and training records. The inspection covered all components of London's water system, including the London portion of the Elgin-Middlesex Pumping Station, which is operated by the Ontario Clean Water Agency under contract to the City of London.

On November 27, 2013, the MOE issued the City of London Water Distribution System Inspection Report. The report summarizes all of the inspection findings, and lists any incidents of non-compliance with regulatory requirements.

Only one incident of non-compliance was identified, which the MOE reported as follows:

"During the physical inspection, it was noted that pencil was used to record information in the logbook at the Springbank Reservoirs."

The MOE requires that logbook entries be made using ink.

This incident occurred on September 11, 2013. An electrical storm had caused power outages throughout London, and many electronic components of the water infrastructure were adversely impacted. City staff attended several locations that evening to resolve the problems. At the Springbank Reservoirs, staff worked from 9:30 pm to 11:30 pm to resolve issues related to damaged circuitry of a large electronic flow-meter. Before leaving the site, the Technologist realized that he had left his pen at the previous work location that evening. Rather than make no logbook entry, he proceeded to record a summary of his work activities in pencil.

This incident of non-compliance does not reflect a drinking water quality hazard, but is indicative of the highly regulated nature of municipal drinking water systems in Ontario. It also serves to illustrate the level of diligence and scrutiny employed by MOE Inspectors when reviewing water system operations.

The results of the annual MOE Inspections are used to generate *Ministry of the Environment Drinking Water System Inspection Rating Records*. Each year these rating records (or "report cards") for Ontario drinking water systems are compiled and made available to the public. The rating records were developed to encourage continuous improvement by drinking water system operators.

Despite the one incident of non-compliance, The City of London received a Final Inspection Rating of 100% for 2013.

The following summarizes London's recent Final Inspection Ratings:

- 2011 - 94.39%
- 2012 - 95.83%
- 2013 – 100%

The Inspection Summary Rating Record is attached as Appendix 'A'. The Drinking Water System Inspection Report can be found at:

<http://www.london.ca/residents/Water/Water-System/Pages/Summary-and-Annual-Reports.aspx>

| | |
|---------------|--------|
| Agenda Item # | Page # |
| | |

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| SUMMARY |
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The Ontario Ministry of the Environment (MOE) performs rigorous annual inspections to ensure that municipalities are operating their water systems in compliance with all applicable legal requirements.

The MOE recently completed the 2013 inspection of London’s drinking water system, and outlined the findings in the City of London Water Distribution System Inspection Report.

The City of London received a Final Inspection Rating of 100% for the 2013 MOE inspection.

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| PREPARED BY: | RECOMMENDED BY: |
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| JOHN SIMON, P.ENG. DIVISION MANAGER, WATER OPERATIONS | JOHN LUCAS, P.ENG. DIRECTOR - WATER AND WASTEWATER |
| REVIEWED & CONCURRED BY: | |
| | |
| JOHN BRAAM, P.ENG. MANAGING DIRECTOR OF ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER | |

CC:

- Art Zuidema – City Manager
- Roland Welker – Division Manager – Water Engineering
- Dan Huggins - Water Quality Manager

Agenda Item # Page #

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Appendix 'A'

Drinking Water Inspection Summary Rating Record

Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2013-2014)

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| DWS Name: CITY OF LONDON DISTRIBUTION SYSTEM |
| DWS Number: 260004917 |
| DWS Owner: London, City Of |
| Municipal Location: London |
| Regulation: O.REG 170/03 |
| Category: Large Municipal Residential System |
| Type Of Inspection: Adhoc |
| Inspection Date: September 24, 2013 |
| Ministry Office: London District |

Maximum Question Rating: 393

| Inspection Module | Non-Compliance Rating |
|--------------------------------|-----------------------|
| Treatment Processes | 0 / 64 |
| Distribution System | 0 / 21 |
| Operations Manuals | 0 / 28 |
| Logbooks | 0 / 14 |
| Certification and Training | 0 / 28 |
| Water Quality Monitoring | 0 / 63 |
| Reporting & Corrective Actions | 0 / 84 |
| Other Inspection Findings | 0 / 0 |
| Treatment Process Monitoring | 0 / 91 |
| TOTAL | 0 / 393 |

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| Inspection Risk Rating | 0.00% |
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| FINAL INSPECTION RATING: | 100.00% |
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