

Annual Summary Report

North Middlesex Distribution System

2019

Prepared for the Municipality of North Middlesex

By the Ontario Clean Water Agency

North Middlesex Distribution System - Annual Summary Report 2019

Table of Contents

Section Number	CONTENTS	Page Number
1	"Compliance with the Safe Drinking Water Act and Regulation 170/03, drinking water works permit, municipal drinking water licence and any orders applicable to the system "	
	Statement of Compliance	2
2	"Non-Compliance with the Safe Drinking Water Act and Regulation 170/03, drinking water works permit, municipal drinking water licence and any orders applicable to the system"	
	Details of the non-compliance issues as well as how and when any non- compliance issues were corrected	2-3
3	"Assessment of the capability of the system to meet existing and planned uses of the system"	4 - 5
	Summary and discussion of quantity of water supplied	

SECTION 1

Statement of Compliance

This report is a summary of water quality information for the North Middlesex Distribution System and published in accordance with Schedule 22 of Ontario's Safe Drinking Water Act, Ontario Regulation 170/03 for the reporting period of January 1, 2019 to December 31, 2019. The North Middlesex Distribution System is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by the Ontario Clean Water Agency on behalf of the Municipality of North Middlesex.

The North Middlesex Distribution System (NMDS) was operated and maintained in such a manner that the water supplied to the consumers serviced by the system satisfied all the requirements in the Safe Drinking Water Act, the Regulations, the NMDS Drinking Water Works Permit Number: 002-201, and the NMDS Municipal Drinking Water Licence Number: 002-101. The last Ministry of Environment, Conservation & Parks (MECP) inspection occurred July 18, 2019; three (3) non-compliance issues were identified. The inspection report was received on August 23, 2019.

SECTION 2

Details of the non-compliance issues as well as how and when any non-compliance issues were corrected

There were three (3) non-compliance issues identified during the July 18, 2019 MECP Inspection; facility inspection rating was 98.77%. MECP Inspection Report No. 1-KZ0S0 was received on August 23, 2019.

Non Compliance (1):

In accordance with condition 2.6, Schedule B, Drinking Water Works Permit (#002-201), the owner shall notify the legal owner of any part of the drinking water system that is prescribed as a municipal drinking water system by section 2 of O. Reg. 172/03 of the requirements of the licence and this drinking water works permit as applicable to the prescribed system. Legal owners include developers that own subdivisions that have not yet been transferred to the municipality.

Action Required:

The municipal system owner shall provide at minimum, a copy of the Municipal Water Works Licence and a copy of the Drinking Water Works Permit to the legal owners of the new developments.

Resolution:

Before the issuance of this inspection report, written confirmation was received by the inspecting officer that a copy of the Licence and Permit were provided to legal owners of the new developments. No further actions are required by the owner.

Non Compliance (2):

To ensure that the integrity of the Parkhill Reservoir is intact, the owner / operating authority shall ensure the black protective covers are properly installed in a manner acceptable to the consulting engineer whom completed the original recommendation to install membranes.

Action Required:

No later than September 13, 2019, the Owner or Operating Authority provide written and photographic confirmation that the required action(s) have been completed. Confirmation shall be sent to MECP Provincial Officer Meghan Morgan, email: <u>Meghan.Morgan@ontario.ca</u>.

North Middlesex Distribution System - Annual Summary Report 2019

Engineers installed an outer black protective cover over the reservoir membrane seal; Engineers are to determine if this cover is necessary for reservoir integrity; if the cover is necessary guidance has been requested for repair.

Resolution:

Provincial Officer Meghan Morgan extended Action Required Compliance Date to 2019/09/27

Engineers do not consider repair of the outer protective cover an immediate concern; Engineers recommend repair action in the next 12 months.

MECP Officer was sent an email containing repair plan; officer acknowledged receipt requesting to be updated with repair progress as applicable. Progress report was sent to MECP on Sept. 27, 2019.

MECP Officer was sent an email containing written and photographic confirmation that the required Parkhill Reservoir repair was completed; the email was sent to MECP on Feb. 19, 2020.

Non Compliance (3):

Action Required:

Retain the services of a qualified electrician to ensure exposed cut electrical wires on top of the Parkhill Reservoir are assessed and actions are performed to ensure a fit state of repair.

Resolution:

Before the issuance of this inspection report, confirmation was received by the inspecting officer that the exposed electrical wires were removed and repairs have been completed. There are no further actions required.

Details of adverse water quality or potential issues reported as well as how and when any adverse water quality issues were corrected

AWQI # 146317:

On July 11, 2019 Adverse Water Quality Incident # 146317 was issued following the detection of 1 cfu /100 ml Total Coliform in a sample collected on July 09, 2019.

Action(s) Required:

Re-sample.

Collect samples from site of original adverse result plus at a location upstream and downstream from original site.

Resolution:

July 11, 2019 re-samples submitted identified 0cfu/100mL. July 12, 2019 re-samples submitted identified 0cfu/100mL Meeting the requirements in O. Reg. 169/03, therefore no further action required.

There were no Spill Incidents reported in 2019.

SECTION 3

Summary and discussion of quantity of water supplied

In accordance with Schedule 22-2 (3) "the report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system."

1. A summary of the quantities and totalized volume of water supplied during the period covered by this report including monthly totals and the annual total flow with respect to DWS 260006529

The North Middlesex Distribution System, Municipal Drinking Water License (License Number: 002-101) does not identify a system rated capacity. The total flow for this reporting period for the North Middlesex Distribution System was 1,350,969 m³/yr. The maximum monthly flow for the reporting period was 127,285 m³ recorded in July 2019.

See attached summary of North Middlesex Distribution System water flow from LHPWSS.

North Middlesex Distritution System 2019 Water Flows From LHPWSS - Cubic Meters

2019	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Avgerage
Lucan (quarterly)	-	-	12,519	-	-	5,402	-	-	5,701	-	-	4,945	28,567	9,522
Parkhill-Mount Carmel	39,040	39,402	42,437	39,830	44,171	49,937	49,893	49,008	51,384	50,774	48,599	49,407	553,882	46,157
Parkhill- McGillivray Twp	13,404	13,284	14,909	13,343	15,143	15,876	18,037	18,350	18,010	16,752	16,582	14,849	188,539	15,712
Ailsa Craig Main Meter	969	881	966	940	932	982	1,017	996	971	1,053	1,050	1,113	11,870	989
Ailsa Craig 7 houses	91	86	91	90	148	119	154	132	121	95	93	99	1,319	110
Ailsa Craig-6" meter	22,809	20,756	23,182	23,293	21,282	19,924	21,817	20,515	13,451	14,551	14,040	14,649	230,269	19,189
Ailsa Craig Right of Way	278	253	271	288	329	354	344	334	330	347	324	328	3,780	315
Carlise-Hwy 7 Large Meter	5,078	4,691	5,512	5,613	5,918	6,305	7,043	7,012	5,805	5,995	5,769	7,266	72,007	6,001
McGillivray Pump Station - New	9,801	11,162	13,354	11,976	12,581	14,339	14,708	14,109	10,448	11,063	10,594	11,403	145,538	12,128
Nairn Rd- Strathroy Line	8,146	7,453	8,311	8,220	8,574	11,189	14,272	15,309	12,391	7,539	6,965	6,829	115,198	9,600
Monthly Total	99,616	97,968	121,552	103,593	109,078	124,675	127,285	125,765	117,856	108,169	104,016	110,888	1,350,969	112,581