

# Mississippi Mills Drinking Water System

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## 2016 Annual Water Report

Reporting period of January 1, 2016 – December 31, 2016

Prepared For: The Municipality of Mississippi Mills

Prepared By:



**Ontario Clean Water Agency**  
**Agence Ontarienne Des Eaux**

This report has been prepared to satisfy the annual reporting requirements of the  
Provincial Regulations and Guidelines

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## Report Availability

This system does not serve more than 10,000 residence and the annual reports will be available to users at the Municipality of Mississippi Mills Office. Notification will be at the Municipal Office and copies provided free of charge if requested. The Municipality of Mississippi Mills is located at

3131 Old Perth Rd.  
 Almonte, Ontario.  
 KOA 1A0  
[www.mississippimills.ca](http://www.mississippimills.ca)

There are no additional drinking water systems that receive drinking water from this system.

## Compliance Report Card

Drinking Water System Number:	<b>220001290</b>
System Owner:	<b>Municipality of Mississippi Mills</b>
Operating Authority:	Ontario Clean Water Agency
Drinking Water System Category:	Large Municipal Residential
Reporting Period:	January 1, 2016 – December 31, 2016

Compliance Event	# of Events	Details
Ministry of Environment Inspections	1	There was one (1) inspection report received during this reporting period. <ul style="list-style-type: none"> <li>• Report received from November 23, 2015 Inspection on April 22, 2016                             <ul style="list-style-type: none"> <li>○ Inspection Rating 100%</li> </ul> </li> </ul>
Ministry of Labour Inspections	0	
QEMS External Audit	1	One (1) External On-Site Audit <ul style="list-style-type: none"> <li>• No Non-Conformance</li> </ul>
AWQI's	0	
Non-Compliance	0	
Community Complaints	0	See Community Complaint section of this report
Spills	0	

## Quality Control Measures

The Municipality of Mississippi Mills Well System is part of OCWA's operational Eastern Regional Hub. The facilities are supported by cluster, regional and corporate resources. Operational Services are delivered by OCWA staff who live and work in the community.

OCWA operates facilities in compliance with applicable regulations. The facility has comprehensive manuals detailing operations, maintenance, instrumentation, and emergency procedures. All procedures are treated as active documents, with annual reviews.

OCWA has additional "Value Added" and operational support services that the Municipality of Mississippi Mills benefits from including:

- Access to a network of operational compliance and support experts at the regional and corporate level, as well as affiliated programs that include the following:
  - Quality & Environmental Management System, Occupational Health & Safety System and an internal compliance audit system.
  - Process Data Collection (PDC) facility operating information repository, which consolidates field data, online instrumentation, and electronic receipt of lab test results for reporting, tracking and analysis.
  - Work Management System (WMS) that tracks and reports maintenance activities, and creates predictive and preventative reports.
  - Outpost 5 wide-area SCADA system allows for process optimization and data logging, process trending, remote alarming and optimization of staff time.
- Client reporting which includes operational data, equipment inventory, financial statements, maintenance work orders, and capital status reports
- Site-Specific Contingency Plans and Standard Operating Procedures
- Use of accredited laboratories
- Additional support in response to unusual circumstances, and extra support in an emergency.
- Use of sampling schedules for external laboratory sampling

## System Process Description

The Mississippi Mills Drinking Water System consists of 5 drilled wells located throughout the Ward of Almonte. The system supplies water to only the Ward of Almonte and is owned by The Corporation of the Municipality of Mississippi Mills. The Ontario Clean Water Agency is the Operating Authority.

Well 3 is located in the eastern portion of the Town, approximately 60 m north of Ottawa Street and Harold Street. Well 3 is contained in its own brick construction pump house and is equipped with a turbine pump. Disinfection is achieved through injection of sodium hypochlorite into the feeder main prior to the treated water being discharged into a chlorine contact tank.

Well 5 is located along Almonte Street (County Road 16) near the south west end of Town. Well 5 is contained in its own brick construction pump house and is equipped with a vertical turbine pump. Disinfection is achieved through injection of sodium hypochlorite into the feeder main prior to the treated water being discharged into a chlorine contact tank.

Well 6 is an artesian well which is located in Gemmill Park in the south end of Town, immediately east of Highway 29. Well 6 is contained in its own brick construction pump house and is equipped with a turbine pump. Disinfection is achieved through injection of sodium hypochlorite into the feeder main prior to the treated water being discharged into a chlorine contact tank.

Wells 7 and 8 are located within a single pump house near the northeast edge of Town, along the north side of Paterson Street. Well 7 and 8 are enclosed within a single brick and aluminum clad vented watertight pump house. Each well is equipped with a vertical turbine pump. The pumps are located directly on top of the well casings. Disinfection is achieved through injection of liquid sodium hypochlorite into the feeder main of each well, prior to the treated water being discharged into a single chlorine contact chamber.

### Treatment Chemicals used during the reporting year:

Chemical Name	Use	Supplier
Sodium Hypochlorite	Disinfection	Brenntag

## Summary of Non-Compliance

### Adverse Water Quality Incidents

AWQI #	Date	Legislation	Problem	Details	Corrective ActionTaken
There were no non-compliances identified for the reporting period.					

### Non-Compliance

Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
There were no non-compliances identified for the reporting period.				

### Non-Compliance Identified in a Ministry Inspection:

There was one (1) inspection report received during this reporting period.

- Report received from November 23, 2015 Inspection on April 22, 2016
  - Inspection Rating 100%

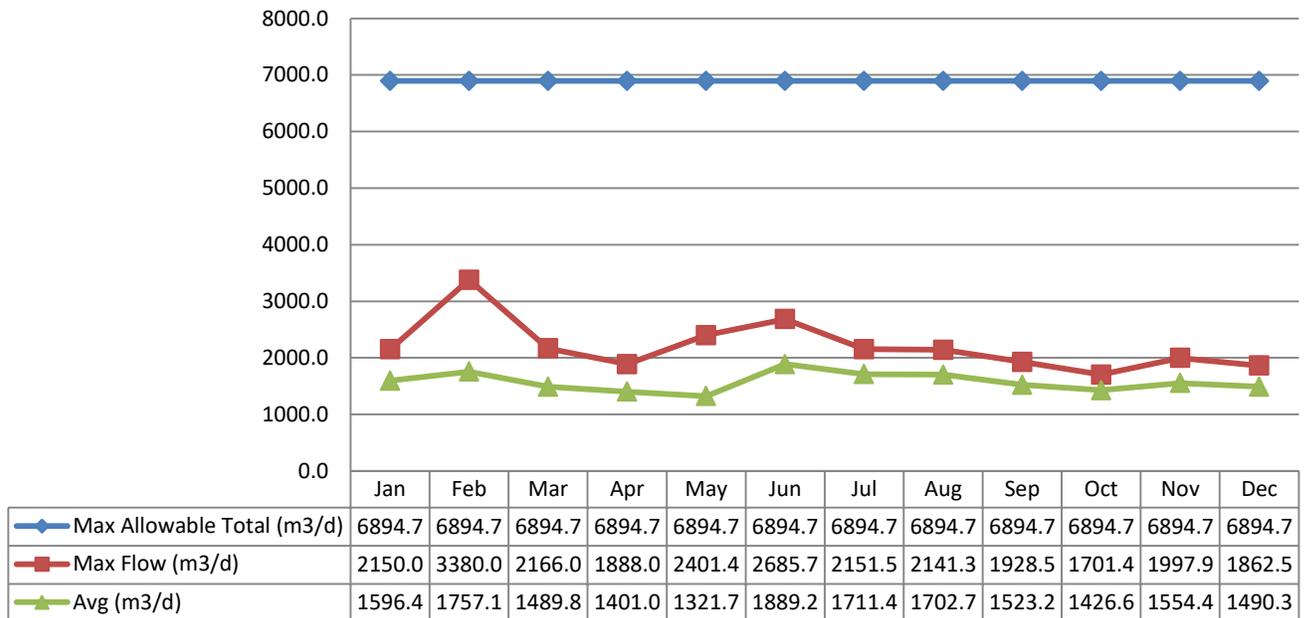
Legislation	requirement(s) system failed to meet	duration of the failure (i.e. date(s))	Corrective Action	Status
Inspection Report 1-BZPY1	Air vents not screened	22-Apr-2016	Well inspection completed by third party. Screens verified to be proper.	Complete
Inspection Report 1-BZPY1	Logbooks not completed properly. Not signed in, Missing OIC	22-Apr-2016	Staff to take OCWA On-line Logbook training	Complete
Inspection Report 1-BZPY1	Directors Notification not completed on-time	22-Apr-2016	Training will be provided on the Standard Operating Procedure (SOP) regarding installation of equipment.	Complete

## Flows

Raw flows are regulated by the Permit to Take Water and the Treated flows are regulated by the Municipal License. Both the Municipal License and the Permit to Take Water have the same capacity restrictions.

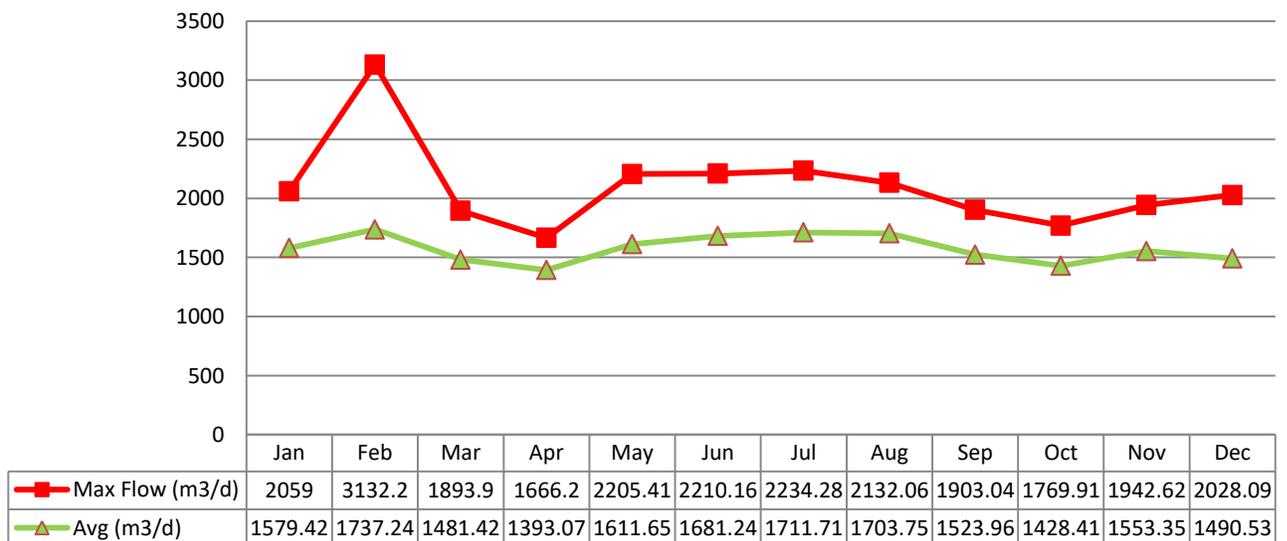
### Total All Sources Total Flow Summary

The elevated single day flows in February are the result of a system leak.



### Flow Demand (m3/d)

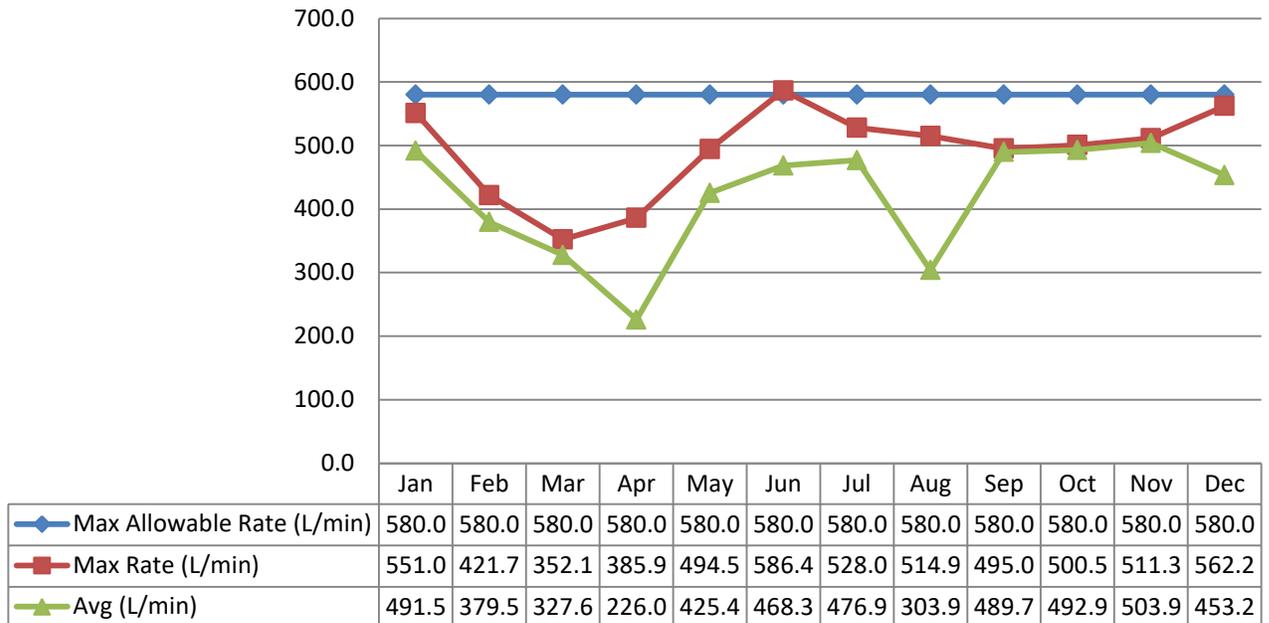
The elevated single day flows in February are the result of a system leak.



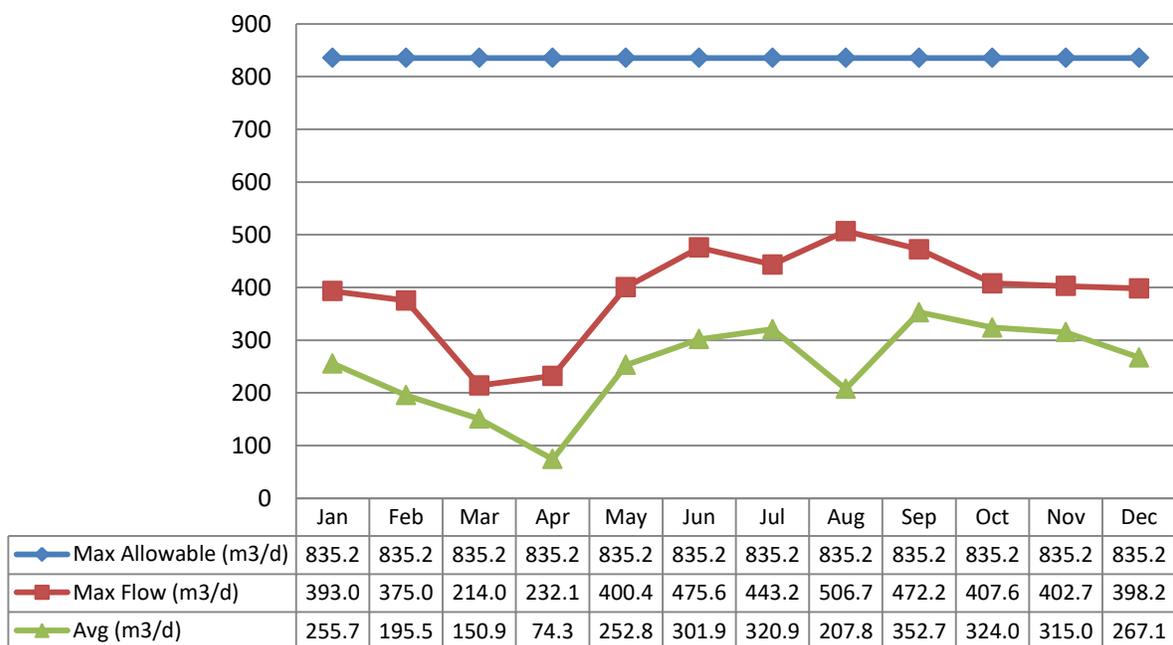
### Well 3

#### Rate of Taking

The exceedance event in June was due to a flow control device fault. The event was assessed for compliance.



#### Monthly Total Flow

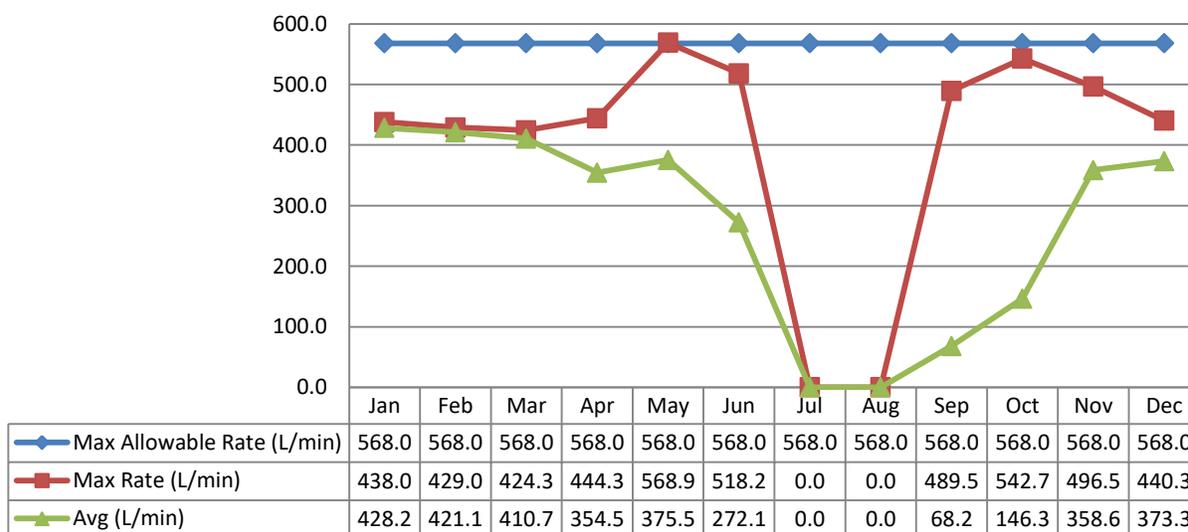


## Well 5

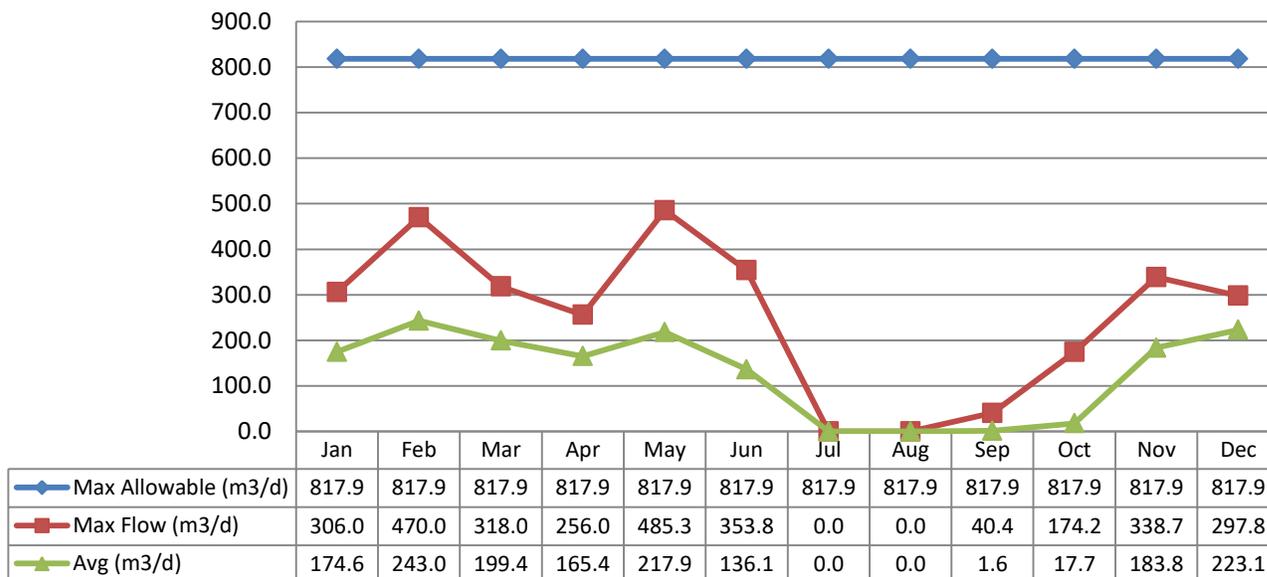
The well was removed from service for repairs in July; returned to service in September.

### Rate of Taking

The exceedance event in May was due to a flow control device fault. The event was assessed for compliance.



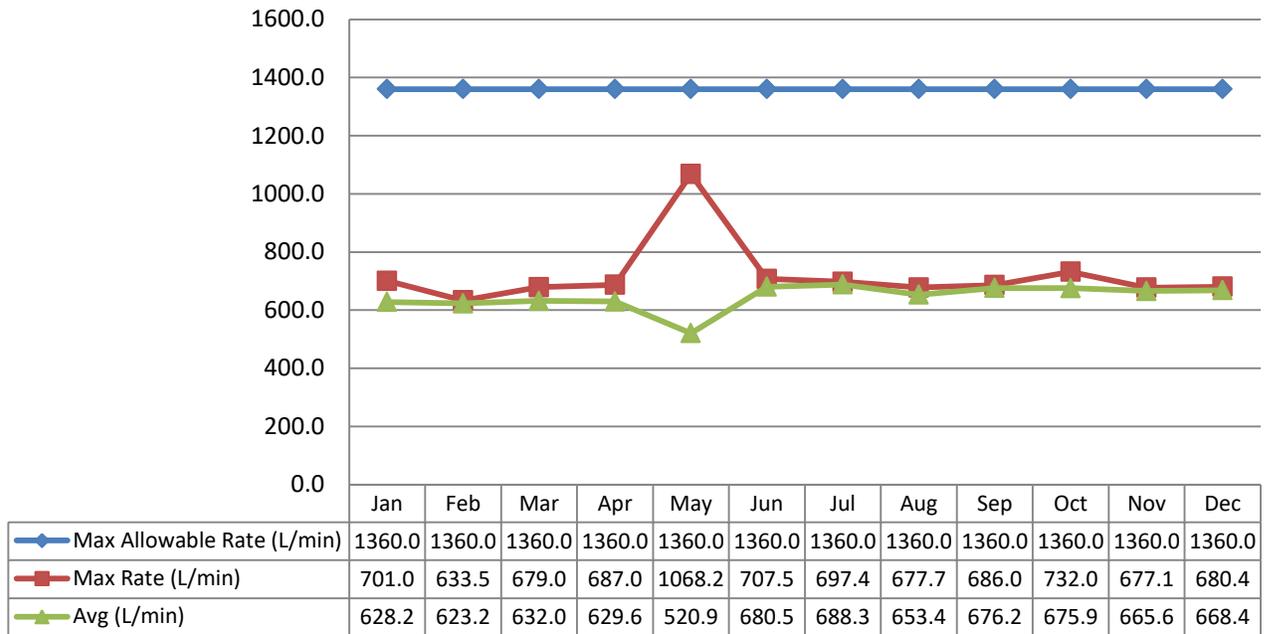
### Monthly Total Flow



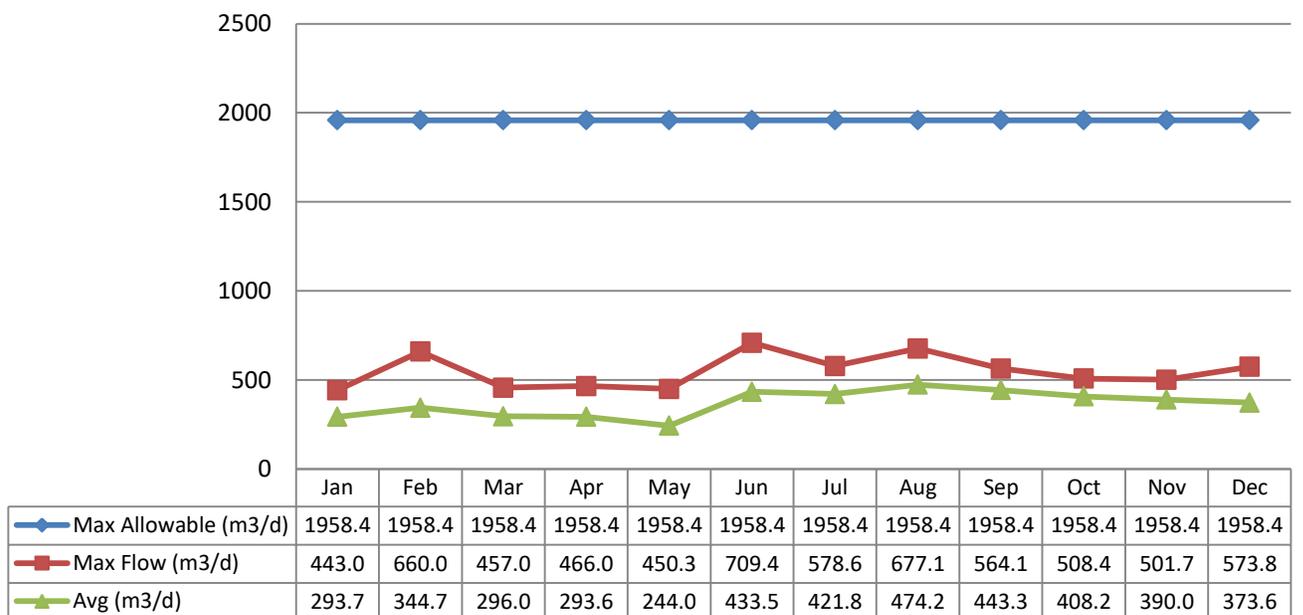
## Well 6

### Rate of Taking

Note the single day flow spike was the result of maintenance to the flow control device.



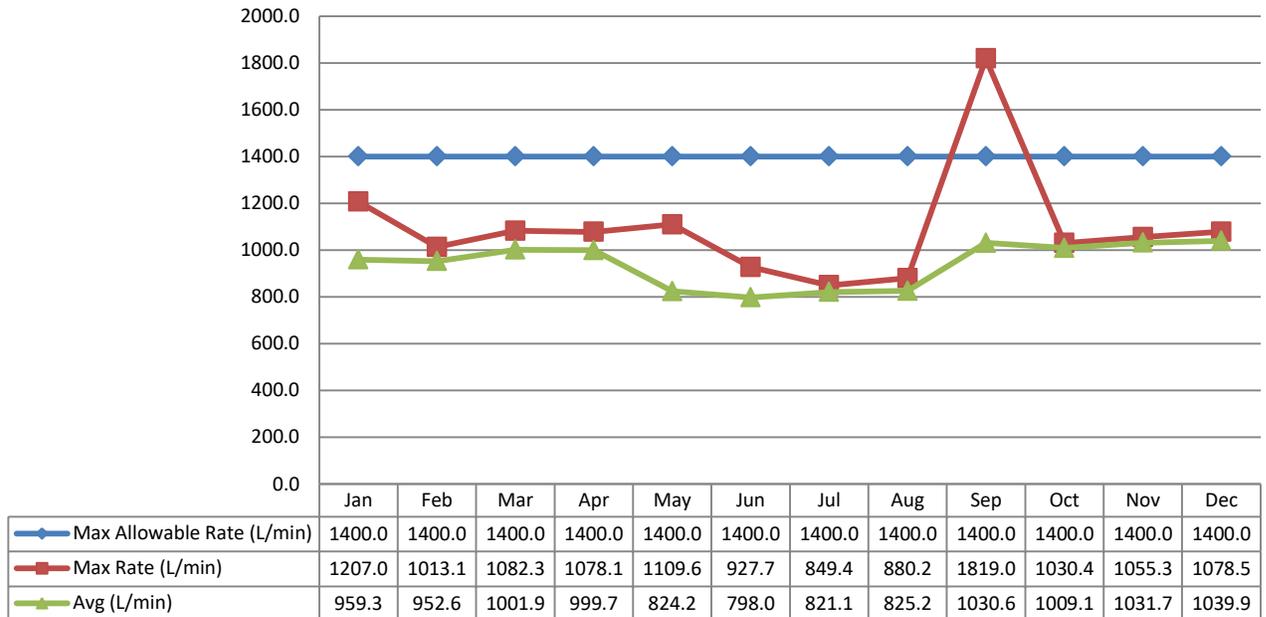
### Monthly Total Flow



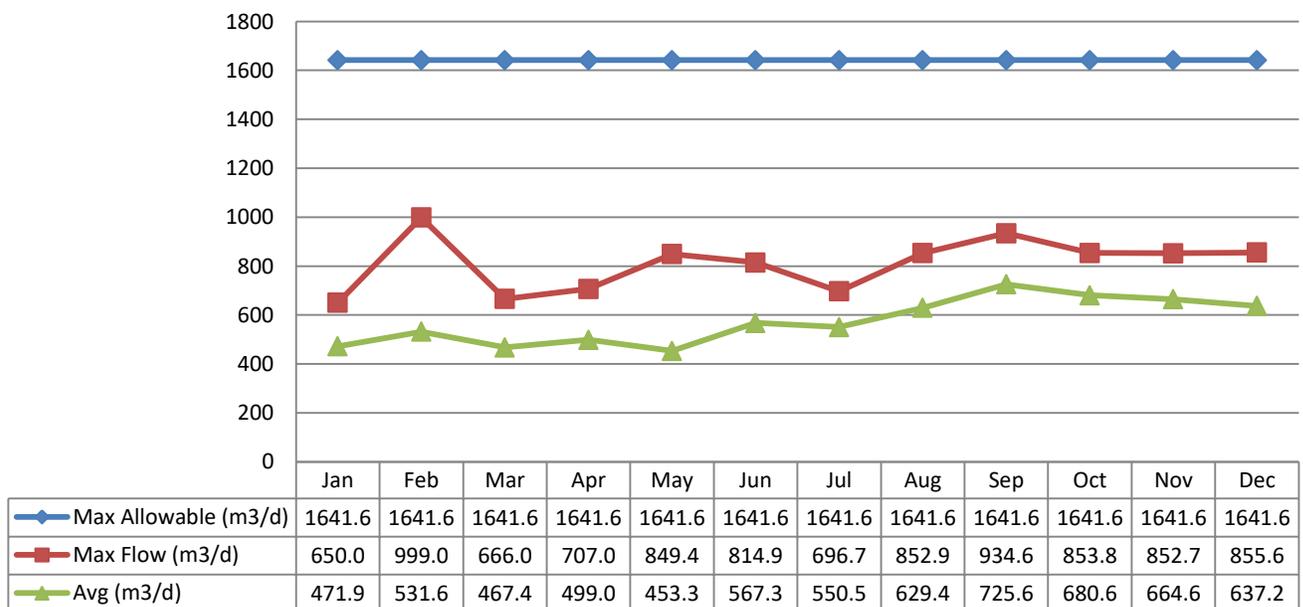
## Well 7

### Rate of Taking

The exceedance event in September was due to a flow control device fault. The event was assessed for compliance.



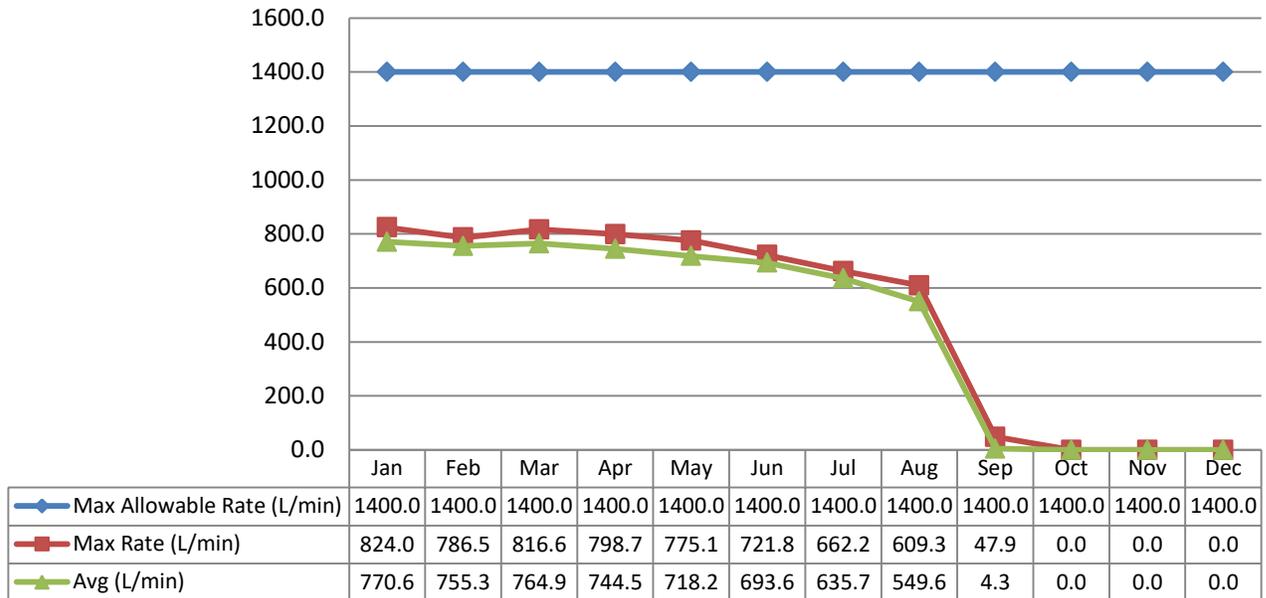
### Monthly Total Flow



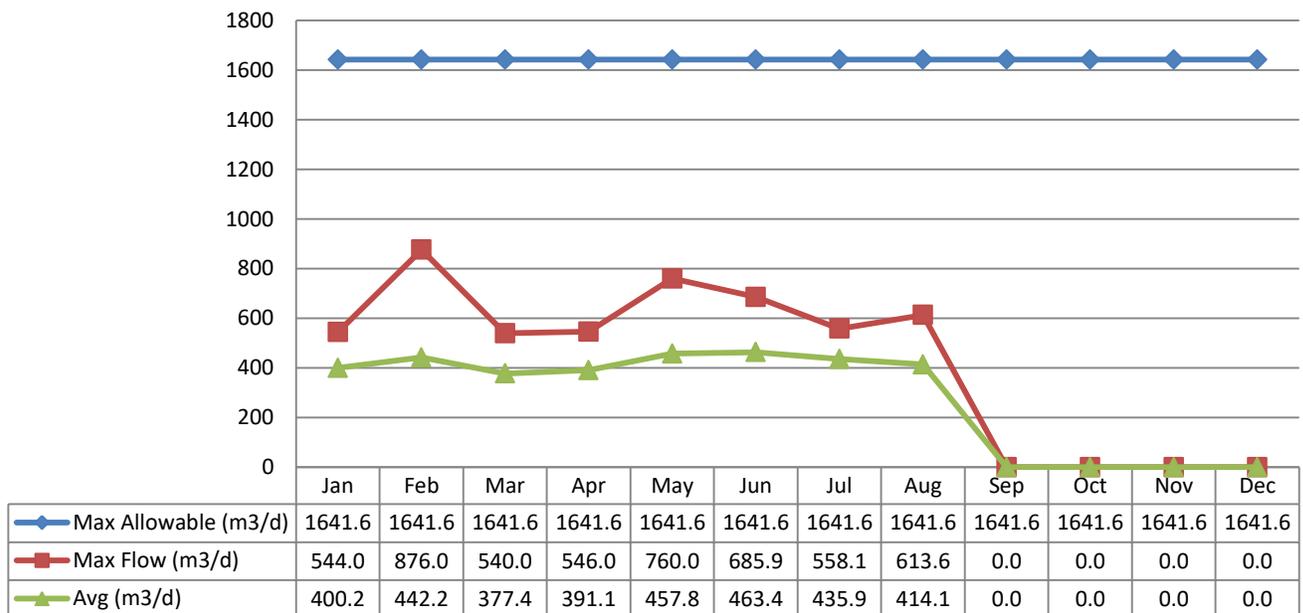
## Well 8

Note the well was removed from service due to a pump failure, returned to service January 2017.

### Rate of Taking



### Monthly Total Flow



## Regulatory Sample Results Summary

### Microbiological Testing

	No. of Samples Collected	Range of E.Coli		Range of Total Coliform Results		Number of HPC Samples	Range of HPC Results	
		Min	Max	Min	Max		Min	Max
<b>Raw Water</b>								
Well 3	52	0	0	0	0			
Well 5	40	0	0	0	1			
Well 6	52	0	0	0	3			
Well 7	52	0	0	0	1			
Well 8	34	0	0	0	13			
<b>Treated Water</b>								
Well 3	52	0	0	0	0	52	2	124
Well 5	38	0	0	0	0	38	2	2
Well 6	52	0	0	0	0	52	2	24
Well 7	0	N/A	N/A	N/A	N/A	0	N/A	N/A
Well 8	1	0	0	0	0	1	2	2
Wells 7&8 combined	52	0	0	0	0	52	2	234
<b>Distribution</b>	179	0	0	0	0	128	2	36

### Operational Testing

Operational Testing (170/03, Sch.7, Sch.8 or Sch.9):

Parameter	Location	Number of Grab Samples	Range (min-max)
Raw Water Turbidity (NTU)	Well 3	8760	0 - 2.17
	Well 5	8760	0 - 2.03
	Well 6	8760	0.01 - 2.17
	Well 7	8760	0 - 2.0
	Well 8	8760	0.04 – 2.0
Treated Water Free Chlorine Residual (mg/L)	Well 3	8760	0 – 2.0
	Well 5	8760	0 – 1.84
	Well 6	8760	0 -2.0
	Well 7&8 Combined	8760	0 – 1.79
Distribution Free Chlorine Residual (mg/L)	Gemmill's Bay PS	8760	0.452 – 1.6
	Various locations throughout the distribution system	179	0.26 – 1.56

NOTE: spikes recorded by on-line instrumentation were a result of air bubbles and various maintenance/calibration activities. All values are reviewed for compliance with O.Reg 170/03.

### Additional Treated Water Samples

	Units	Well 3	Well 5	Well 6	Well 7&8	ODWSOG	
						AO	OG
Alkalinity	mg/L	296 - 318	318 - 324	289 - 301	296 - 316		30 - 300
Colour	TCU	2 - 4	2 - 3	2 - 2	2 - 4	5	
Total Hardness	mg/L	166 - 416	392 - 418	207 - 416	170 - 427		80 - 100
pH	N/A	7.75 – 7.98	7.85 – 8.02	7.79 – 8.01	7.79 – 7.98		6.5 – 8.5
TDS	mg/L	565 - 679	660 - 757	591 - 696	459 - 573	500	
Chloride	mg/L	65.4 - 103	143 - 161	65 - 106	64.8 – 71.5	250	
Conductivity	uS/cm	842 - 960	1030 - 1100	881 - 984	837 - 853	Measured during TDS testing.	

ODWQS – Ontario Drinking Water Standards, Objectives and Guidelines

AO – Asthetic Objective

OG – Operational Guideline

### Summary of additional samples Well 5:

The two following tables are the sample results from additional sample collected at Well 5:

The first table contains the results of sample collected because the area had once housed transformers. Please note the samples are collected on raw water. There is no MAC / IMAC (Maximum Acceptable Concentration / Interim Maximum Acceptable Concentration) for raw water but the treated water MAC /IMAC have been provided for reference.

The second table contains the results of sample collected because of the wells' proximity to the wastewater treatment lagoons. These results help to assess the integrity of the lagoon cells.

Raw Water: Well 5 Parameter	Unit of Measure	Sample Date	Result Value	ODWS	
				MAC	IMAC
Arsenic	ug/L	October 2016	0.2		25.0
Chromium	ug/L	October 2016	<2.0	50	
PCBs (Polychlorinated Biphenyls)	ug/L	October 2016	<0.05		3.0

Treated Water Parameter	Unit of Measure	Treated Water: Well 5 Annual Average 2015
TKN (Total Kjeldahl Nitrogen)	mg/L	0.087
Total Phosphorus	mg/L	<0.01
Phosphate (O-PO4)	mg/L	<0.01
Dissolved Reactive Phosphorus	mg/L	<0.01
NH3 + NH4 as N	mg/L	<0.01

## Inorganic Parameters

These parameters are tested annually as a requirement under 170/03. Sodium and Fluoride are required to be tested every 5 years. Nitrates are tested quarterly as required under 170/03. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

- MAC = Maximum Allowable Concentration as per O.Reg 169/03
- MDL = Minimum Detection Limit the laboratory can test.

Parameter	Sample Date	Sample Result	Exceedance
Antimony: Sb (ug/L) - TW3	09/09/2015	<MDL 0.1	No
Antimony: Sb (ug/L) - TW5	09/09/2015	<MDL 0.1	No
Antimony: Sb (ug/L) - TW6	09/09/2015	<MDL 0.1	No
Antimony: Sb (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
Arsenic: As (ug/L) - TW3	09/09/2015	0.7	No
Arsenic: As (ug/L) - TW5	09/09/2015	0.9	No
Arsenic: As (ug/L) - TW6	09/09/2015	1.0	No
Arsenic: As (ug/L) - TW7&8	09/09/2015	1.8	No
Barium: Ba (ug/L) - TW3	09/09/2015	130	No
Barium: Ba (ug/L) - TW5	09/09/2015	172	No
Barium: Ba (ug/L) - TW6	09/09/2015	95	No
Barium: Ba (ug/L) - TW7&8	09/09/2015	156	No
Boron: B (ug/L) - TW3	09/09/2015	234	No
Boron: B (ug/L) - TW5	09/09/2015	49	No
Boron: B (ug/L) - TW6	09/09/2015	274	No
Boron: B (ug/L) - TW7&8	09/09/2015	177	No
Cadmium: Cd (ug/L) - TW3	09/09/2015	<MDL 0.02	No
Cadmium: Cd (ug/L) - TW5	09/09/2015	<MDL 0.02	No
Cadmium: Cd (ug/L) - TW6	09/09/2015	<MDL 0.02	No
Cadmium: Cd (ug/L) - TW7&8	09/09/2015	<MDL 0.02	No
Chromium: Cr (ug/L) - TW3	09/09/2015	<MDL 2.0	No
Chromium: Cr (ug/L) - TW5	09/09/2015	<MDL 2.0	No
Chromium: Cr (ug/L) - TW6	09/09/2015	<MDL 2.0	No
Chromium: Cr (ug/L) - TW7&8	09/09/2015	<MDL 2.0	No
Mercury: Hg (ug/L) - TW3	09/09/2015	<MDL 0.02	No
Mercury: Hg (ug/L) - TW5	09/09/2015	<MDL 0.02	No
Mercury: Hg (ug/L) - TW6	09/09/2015	<MDL 0.02	No
Mercury: Hg (ug/L) - TW7&8	09/09/2015	<MDL 0.02	No
Selenium: Se (ug/L) - TW3	09/09/2015	2	No
Selenium: Se (ug/L) - TW5	09/09/2015	2	No
Selenium: Se (ug/L) - TW6	09/09/2015	2	No
Selenium: Se (ug/L) - TW7&8	09/09/2015	4	No
Sodium: Na (mg/L) - TW3	15/07/2013	44.00	Yes
Sodium: Na (mg/L) - TW3 - resample	22/07/2013	41.00	Yes
Sodium: Na (mg/L) - TW5	15/07/2013	57.00	Yes
Sodium: Na (mg/L) - TW5 - resample	22/07/2013	55.00	Yes

Parameter	Sample Date	Sample Result	Exceedance
Sodium: Na (mg/L) - TW7&8	15/07/2013	40.00	Yes
Sodium: Na (mg/L) - TW7&8 - resample	22/07/2013	39.00	Yes
Sodium: Na (mg/L) - TW6	03/02/2015	42.00	Yes
Sodium: Na (mg/L) - TW6 - resample	05/02/2015	40.00	Yes
Uranium: U (ug/L) - TW3	09/09/2015	0.78	No
Uranium: U (ug/L) - TW5	09/09/2015	0.85	No
Uranium: U (ug/L) - TW6	09/09/2015	0.95	No
Uranium: U (ug/L) - TW7&8	09/09/2015	1.14	No
Fluoride: F (mg/L) - TW3	20/10/2015	0.3	No
Fluoride: F (mg/L) - TW5	20/10/2015	0.3	No
Fluoride: F (mg/L) - TW6	20/10/2015	0.4	No
Fluoride: F (mg/L) - TW7&8	20/10/2015	0.4	No
Nitrite (mg/L) - TW3	2016/01/06	<MDL 0.1	No
Nitrite (mg/L) - TW3	2016/04/06	<MDL 0.1	No
Nitrite (mg/L) - TW3	2016/07/12	<MDL 0.1	No
Nitrite (mg/L) - TW3	2016/10/11	<MDL 0.1	No
Nitrite (mg/L) - TW5	2016/01/06	<MDL 0.1	No
Nitrite (mg/L) - TW5	2016/04/06	<MDL 0.1	No
Nitrite (mg/L) - TW5	Well off line		No
Nitrite (mg/L) - TW5	2016/10/11	<MDL 0.1	No
Nitrite (mg/L) - TW7	2016/10/11	<MDL 0.1	No
Nitrite (mg/L) - TW78	2016/01/06	<MDL 0.1	No
Nitrite (mg/L) - TW78	2016/04/06	<MDL 0.1	No
Nitrite (mg/L) - TW78	2016/07/12	<MDL 0.1	No
Nitrite (mg/L) - TW78	2016/10/11	<MDL 0.1	No
Nitrite (mg/L) - TW6	2016/01/06	<MDL 0.1	No
Nitrite (mg/L) - TW6	2016/04/06	<MDL 0.1	No
Nitrite (mg/L) - TW6	2016/07/12	<MDL 0.1	No
Nitrite (mg/L) - TW6	2016/10/11	<MDL 0.1	No
Nitrate (mg/L) - TW3	2016/01/06	0.3	No
Nitrate (mg/L) - TW3	2016/04/06	0.2	No
Nitrate (mg/L) - TW3	2016/07/12	0.4	No
Nitrate (mg/L) - TW3	2016/10/11	0.3	No
Nitrate (mg/L) - TW5	2016/01/06	0.3	No
Nitrate (mg/L) - TW5	2016/04/06	0.5	No
Nitrate (mg/L) - TW5	Well Off Line		No
Nitrate (mg/L) - TW5	2016/10/11	0.2	No
Nitrate (mg/L) - TW78	2016/01/06	0.8	No
Nitrate (mg/L) - TW78	2016/04/06	1.5	No
Nitrate (mg/L) - TW78	2016/07/12	0.7	No
Nitrate (mg/L) - TW78	2016/10/11	0.6	No
Nitrate (mg/L) - TW6	2016/01/06	0.9	No

Parameter	Sample Date	Sample Result	Exceedance
Nitrate (mg/L) - TW6	2016/04/06	0.5	No
Nitrate (mg/L) - TW6	2016/07/12	0.8	No
Nitrate (mg/L) - TW6	2016/10/11	0.8	No

\*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified mg/L when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

### Schedule 15 Sampling

This facility is sampling under the exemption requirements of O.Reg 170/03 sampling program.

Location Type	Number of Samples	Range of Results		MAC (ug/L)	Number of Exceedances
		MIN	MAX		
Distribution System - Lead Results (ug/L)	N/A	Next Sample 2017			
Distribution System - Alkalinity (mg/L)	6	300	321		
Distribution System - pH Lab	6	7.14	7.34		

### Organic Parameters

These parameters are tested annually as a requirement under 170/03. In the event any of the parameters exceed half of the maximum allowable concentration the parameter is required to be sampled quarterly.

In recent changes to the regulation the following Organic Parameters were removed from Schedule 24:

- Aldicarb
- Aldrin+Dieldrin
- Bendiocarb
- Chlordane
- Cyanazine
- DDT + metabolites
- Dinoseb
- Heptachlor+hepachlor epoxide
- Lindane
- Methoxychlor
- Parathion
- Temephos
- 2,4,5-Trichlorophenoxyacetic acid

The following parameter was added:

- 2-Methyl-4chlorophenoxyacetic Acid (MCPA)

MDL – Minimum Detection Limit

Parameter	Sample Date	Result Value	Exceedance
Alachlor (ug/L) - TW3	09/09/2015	<MDL 0.3	No
Alachlor (ug/L) - TW5	09/09/2015	<MDL 0.3	No
Alachlor (ug/L) - TW6	09/09/2015	<MDL 0.3	No
Alachlor (ug/L) - TW7&8	09/09/2015	<MDL 0.3	No
Aldicarb (ug/L) - TW3	09/09/2015	<MDL 3.0	No
Aldicarb (ug/L) - TW5	09/09/2015	<MDL 3.0	No
Aldicarb (ug/L) - TW6	09/09/2015	<MDL 3.0	No

Parameter	Sample Date	Result Value	Exceedance
Aldicarb (ug/L) - TW7&8	09/09/2015	<MDL 3.0	No
Aldrin + Dieldrin (ug/L) - TW3	09/09/2015	<MDL 0.02	No
Aldrin + Dieldrin (ug/L) - TW5	09/09/2015	<MDL 0.02	No
Aldrin + Dieldrin (ug/L) - TW6	09/09/2015	<MDL 0.02	No
Aldrin + Dieldrin (ug/L) - TW7&8	09/09/2015	<MDL 0.02	No
Atrazine + N-dealkylated metabolites (ug/L) - TW3	09/09/2015	< 0.5	No
Atrazine + N-dealkylated metabolites (ug/L) - TW5	09/09/2015	< 0.5	No
Atrazine + N-dealkylated metabolites (ug/L) - TW6	09/09/2015	< 0.5	No
Atrazine + N-dealkylated metabolites (ug/L) - TW7&8	09/09/2015	< 0.5	No
Azinphos-methyl (ug/L) - TW3	09/09/2015	<MDL 1.0	No
Azinphos-methyl (ug/L) - TW5	09/09/2015	<MDL 1.0	No
Azinphos-methyl (ug/L) - TW6	09/09/2015	<MDL 1.0	No
Azinphos-methyl (ug/L) - TW7&8	09/09/2015	<MDL 1.0	No
Bendiocarb (ug/L) - TW3	09/09/2015	<MDL 3.0	No
Bendiocarb (ug/L) - TW5	09/09/2015	<MDL 3.0	No
Bendiocarb (ug/L) - TW6	09/09/2015	<MDL 3.0	No
Bendiocarb (ug/L) - TW7&8	09/09/2015	<MDL 3.0	No
Benzene (ug/L) - TW3	09/09/2015	<MDL 0.5	No
Benzene (ug/L) - TW5	09/09/2015	<MDL 0.5	No
Benzene (ug/L) - TW6	09/09/2015	<MDL 0.5	No
Benzene (ug/L) - TW7&8	09/09/2015	<MDL 0.5	No
Benzo(a)pyrene (ug/L) - TW3	09/09/2015	<MDL 0.005	No
Benzo(a)pyrene (ug/L) - TW5	09/09/2015	<MDL 0.005	No
Benzo(a)pyrene (ug/L) - TW6	09/09/2015	<MDL 0.005	No
Benzo(a)pyrene (ug/L) - TW7&8	09/09/2015	<MDL 0.005	No
Bromoxynil (ug/L) - TW3	09/09/2015	<MDL 0.3	No
Bromoxynil (ug/L) - TW5	09/09/2015	<MDL 0.3	No
Bromoxynil (ug/L) - TW6	09/09/2015	<MDL 0.3	No
Bromoxynil (ug/L) - TW7&8	09/09/2015	<MDL 0.3	No
Carbaryl (ug/L) - TW3	09/09/2015	<MDL 3.0	No
Carbaryl (ug/L) - TW5	09/09/2015	<MDL 3.0	No
Carbaryl (ug/L) - TW6	09/09/2015	<MDL 3.0	No
Carbaryl (ug/L) - TW7&8	09/09/2015	<MDL 3.0	No
Carbofuran (ug/L) - TW3	09/09/2015	<MDL 1.0	No
Carbofuran (ug/L) - TW5	09/09/2015	<MDL 1.0	No
Carbofuran (ug/L) - TW6	09/09/2015	<MDL 1.0	No
Carbofuran (ug/L) - TW7&8	09/09/2015	<MDL 1.0	No
Carbon Tetrachloride (ug/L) - TW3	09/09/2015	<MDL 0.2	No
Carbon Tetrachloride (ug/L) - TW5	09/09/2015	<MDL 0.2	No
Carbon Tetrachloride (ug/L) - TW6	09/09/2015	<MDL 0.2	No
Carbon Tetrachloride (ug/L) - TW7&8	09/09/2015	<MDL 0.2	No
Chlordane:Total (ug/L) - TW3	09/09/2015	<MDL 0.04	No
Chlordane:Total (ug/L) - TW5	09/09/2015	<MDL 0.04	No
Chlordane:Total (ug/L) - TW6	09/09/2015	<MDL 0.04	No
Chlordane:Total (ug/L) - TW7&8	09/09/2015	<MDL 0.04	No

Parameter	Sample Date	Result Value	Exceedance
Chlorpyrifos (ug/L) - TW3	09/09/2015	<MDL 0.5	No
Chlorpyrifos (ug/L) - TW5	09/09/2015	<MDL 0.5	No
Chlorpyrifos (ug/L) - TW6	09/09/2015	<MDL 0.5	No
Chlorpyrifos (ug/L) - TW7&8	09/09/2015	<MDL 0.5	No
Cyanazine (ug/L) - TW3	09/09/2015	<MDL 0.5	No
Cyanazine (ug/L) - TW5	09/09/2015	<MDL 0.5	No
Cyanazine (ug/L) - TW6	09/09/2015	<MDL 0.5	No
Cyanazine (ug/L) - TW7&8	09/09/2015	<MDL 0.5	No
Diazinon (ug/L) - TW3	09/09/2015	<MDL 1.0	No
Diazinon (ug/L) - TW5	09/09/2015	<MDL 1.0	No
Diazinon (ug/L) - TW6	09/09/2015	<MDL 1.0	No
Diazinon (ug/L) - TW7&8	09/09/2015	<MDL 1.0	No
Dicamba (ug/L) - TW3	09/09/2015	<MDL 5.0	No
Dicamba (ug/L) - TW5	09/09/2015	<MDL 5.0	No
Dicamba (ug/L) - TW6	09/09/2015	<MDL 5.0	No
Dicamba (ug/L) - TW7&8	09/09/2015	<MDL 5.0	No
1,2-Dichlorobenzene (ug/L) - TW3	09/09/2015	<MDL 0.1	No
1,2-Dichlorobenzene (ug/L) - TW5	09/09/2015	<MDL 0.1	No
1,2-Dichlorobenzene (ug/L) - TW6	09/09/2015	<MDL 0.1	No
1,2-Dichlorobenzene (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
1,4-Dichlorobenzene (ug/L) - TW3	09/09/2015	<MDL 0.2	No
1,4-Dichlorobenzene (ug/L) - TW5	09/09/2015	<MDL 0.2	No
1,4-Dichlorobenzene (ug/L) - TW6	09/09/2015	<MDL 0.2	No
1,4-Dichlorobenzene (ug/L) - TW7&8	09/09/2015	<MDL 0.2	No
(DDT) + metabolites (ug/L) - TW3	09/09/2015	<MDL 0.01	No
(DDT) + metabolites (ug/L) - TW5	09/09/2015	<MDL 0.01	No
(DDT) + metabolites (ug/L) - TW6	09/09/2015	<MDL 0.01	No
(DDT) + metabolites (ug/L) - TW78	09/09/2015	<MDL 0.01	No
1,2-Dichloroethane (ug/L) - TW3	09/09/2015	<MDL 0.1	No
1,2-Dichloroethane (ug/L) - TW5	09/09/2015	<MDL 0.1	No
1,2-Dichloroethane (ug/L) - TW6	09/09/2015	<MDL 0.1	No
1,2-Dichloroethane (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
1,1-Dichloroethylene (ug/L) - TW3	09/09/2015	<MDL 0.1	No
1,1-Dichloroethylene (ug/L) - TW5	09/09/2015	<MDL 0.1	No
1,1-Dichloroethylene (ug/L) - TW6	09/09/2015	<MDL 0.1	No
1,1-Dichloroethylene (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
Dichloromethane (ug/L) - TW3	09/09/2015	<MDL 0.3	No
Dichloromethane (ug/L) - TW5	09/09/2015	<MDL 0.3	No
Dichloromethane (ug/L) - TW6	09/09/2015	<MDL 0.3	No
Dichloromethane (ug/L) - TW78	09/09/2015	<MDL 0.3	No
2,4-Dichlorophenol (ug/L) - TW3	09/09/2015	<MDL 0.1	No
2,4-Dichlorophenol (ug/L) - TW5	09/09/2015	<MDL 0.1	No
2,4-Dichlorophenol (ug/L) - TW6	09/09/2015	<MDL 0.1	No
2,4-Dichlorophenol (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW3	09/09/2015	<MDL 5.0	No

Parameter	Sample Date	Result Value	Exceedance
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW5	09/09/2015	<MDL 5.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW6	09/09/2015	<MDL 5.0	No
2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW7&8	09/09/2015	<MDL 5.0	No
Diclofop-methyl (ug/L) - TW3	09/09/2015	<MDL 0.5	No
Diclofop-methyl (ug/L) - TW5	09/09/2015	<MDL 0.5	No
Diclofop-methyl (ug/L) - TW6	09/09/2015	<MDL 0.5	No
Diclofop-methyl (ug/L) - TW7&8	09/09/2015	<MDL 0.5	No
Dimethoate (ug/L) - TW3	09/09/2015	<MDL 1.0	No
Dimethoate (ug/L) - TW5	09/09/2015	<MDL 1.0	No
Dimethoate (ug/L) - TW6	09/09/2015	<MDL 1.0	No
Dimethoate (ug/L) - TW7&8	09/09/2015	<MDL 1.0	No
Dinoseb (ug/L) - TW3	09/09/2015	<MDL 0.5	No
Dinoseb (ug/L) - TW5	09/09/2015	<MDL 0.5	No
Dinoseb (ug/L) - TW6	09/09/2015	<MDL 0.5	No
Dinoseb (ug/L) - TW7&8	09/09/2015	<MDL 0.5	No
Diquat (ug/L) - TW3	09/09/2015	<MDL 5.0	No
Diquat (ug/L) - TW5	09/09/2015	<MDL 5.0	No
Diquat (ug/L) - TW6	09/09/2015	<MDL 5.0	No
Diquat (ug/L) - TW7&8	09/09/2015	<MDL 5.0	No
Diuron (ug/L) - TW3	09/09/2015	<MDL 5.0	No
Diuron (ug/L) - TW5	09/09/2015	<MDL 5.0	No
Diuron (ug/L) - TW6	09/09/2015	<MDL 5.0	No
Diuron (ug/L) - TW7&8	09/09/2015	<MDL 5.0	No
Glyphosate (ug/L) - TW3	09/09/2015	<MDL 25.0	No
Glyphosate (ug/L) - TW5	09/09/2015	<MDL 25.0	No
Glyphosate (ug/L) - TW6	09/09/2015	<MDL 25.0	No
Glyphosate (ug/L) - TW7&8	09/09/2015	<MDL 25.0	No
Heptachlor+Hepachlor Epoxide (ug/L) - TW3	09/09/2015	<MDL 0.1	No
Heptachlor+Hepachlor Epoxide (ug/L) - TW5	09/09/2015	<MDL 0.1	No
Heptachlor+Hepachlor Epoxide (ug/L) - TW6	09/09/2015	<MDL 0.1	No
Heptachlor+Hepachlor Epoxide (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
Lindane: (ug/L) - TW3	09/09/2015	<MDL 0.1	No
Lindane: (ug/L) - TW5	09/09/2015	<MDL 0.1	No
Lindane: (ug/L) - TW6	09/09/2015	<MDL 0.1	No
Lindane: (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
Malathion (ug/L) - TW3	09/09/2015	<MDL 5.0	No
Malathion (ug/L) - TW5	09/09/2015	<MDL 5.0	No
Malathion (ug/L) - TW6	09/09/2015	<MDL 5.0	No
Malathion (ug/L) - TW7&8	09/09/2015	<MDL 5.0	No
Methoxychlor (ug/L) - TW3	09/09/2015	<MDL 0.1	No
Methoxychlor (ug/L) - TW5	09/09/2015	<MDL 0.1	No
Methoxychlor (ug/L) - TW6	09/09/2015	<MDL 0.1	No
Methoxychlor (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
Metolachlor (ug/L) - TW3	09/09/2015	<MDL 3.0	No

Parameter	Sample Date	Result Value	Exceedance
Metolachlor (ug/L) - TW5	09/09/2015	<MDL 3.0	No
Metolachlor (ug/L) - TW6	09/09/2015	<MDL 3.0	No
Metolachlor (ug/L) - TW7&8	09/09/2015	<MDL 3.0	No
Metribuzin (ug/L) - TW3	09/09/2015	<MDL 3.0	No
Metribuzin (ug/L) - TW5	09/09/2015	<MDL 3.0	No
Metribuzin (ug/L) - TW6	09/09/2015	<MDL 3.0	No
Metribuzin (ug/L) - TW7&8	09/09/2015	<MDL 3.0	No
Monochlorobenzene (ug/L) - TW3	09/09/2015	< 0.2	No
Monochlorobenzene (ug/L) - TW5	09/09/2015	< 0.2	No
Monochlorobenzene (ug/L) - TW6	09/09/2015	< 0.2	No
Monochlorobenzene (ug/L) - TW7&8	09/09/2015	< 0.2	No
Paraquat (ug/L) - TW3	09/09/2015	<MDL 1.0	No
Paraquat (ug/L) - TW5	09/09/2015	<MDL 1.0	No
Paraquat (ug/L) - TW6	09/09/2015	<MDL 1.0	No
Paraquat (ug/L) - TW7&8	09/09/2015	<MDL 1.0	No
Parathion (ug/L) - TW3	09/09/2015	<MDL 3.0	No
Parathion (ug/L) - TW5	09/09/2015	<MDL 3.0	No
Parathion (ug/L) - TW6	09/09/2015	<MDL 3.0	No
Parathion (ug/L) - TW7&8	09/09/2015	<MDL 3.0	No
Pentachlorophenol (ug/L) - TW3	09/09/2015	<MDL 0.1	No
Pentachlorophenol (ug/L) - TW5	09/09/2015	<MDL 0.1	No
Pentachlorophenol (ug/L) - TW6	09/09/2015	<MDL 0.1	No
Pentachlorophenol (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
Phorate (ug/L) - TW3	09/09/2015	<MDL 0.3	No
Phorate (ug/L) - TW5	09/09/2015	<MDL 0.3	No
Phorate (ug/L) - TW6	09/09/2015	<MDL 0.3	No
Phorate (ug/L) - TW7&8	09/09/2015	<MDL 0.3	No
Picloram (ug/L) - TW3	09/09/2015	<MDL 5.0	No
Picloram (ug/L) - TW5	09/09/2015	<MDL 5.0	No
Picloram (ug/L) - TW6	09/09/2015	<MDL 5.0	No
Picloram (ug/L) - TW7&8	09/09/2015	<MDL 5.0	No
Polychlorinated Bichenysl(PCB) (ug/L) - TW3	09/09/2015	<MDL 0.05	No
Polychlorinated Bichenysl(PCB) (ug/L) - TW5	09/09/2015	<MDL 0.05	No
Polychlorinated Bichenysl(PCB) (ug/L) - TW6	09/09/2015	<MDL 0.05	No
Polychlorinated Bichenysl(PCB) (ug/L) - TW7&8	09/09/2015	<MDL 0.05	No
Prometryne (ug/L) - TW3	09/09/2015	<MDL 0.1	No
Prometryne (ug/L) - TW5	09/09/2015	<MDL 0.1	No
Prometryne (ug/L) - TW6	09/09/2015	<MDL 0.1	No
Prometryne (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
Simazine (ug/L) - TW3	09/09/2015	<MDL 0.5	No
Simazine (ug/L) - TW5	09/09/2015	<MDL 0.5	No
Simazine (ug/L) - TW6	09/09/2015	<MDL 0.5	No
Simazine (ug/L) - TW7&8	09/09/2015	<MDL 0.5	No
Temephos (ug/L) - TW3	09/09/2015	<MDL 10.0	No
Temephos (ug/L) - TW5	09/09/2015	<MDL 10.0	No

Parameter	Sample Date	Result Value	Exceedance
Temephos (ug/L) - TW6	09/09/2015	<MDL 10.0	No
Temephos (ug/L) - TW7&8	09/09/2015	<MDL 10.0	No
Terbufos (ug/L) - TW3	09/09/2015	<MDL 0.3	No
Terbufos (ug/L) - TW5	09/09/2015	<MDL 0.3	No
Terbufos (ug/L) - TW6	09/09/2015	<MDL 0.3	No
Terbufos (ug/L) - TW7&8	09/09/2015	<MDL 0.3	No
Tetrachloroethylene (ug/L) - TW3	09/09/2015	<MDL 0.2	No
Tetrachloroethylene (ug/L) - TW5	09/09/2015	<MDL 0.2	No
Tetrachloroethylene (ug/L) - TW6	09/09/2015	<MDL 0.2	No
Tetrachloroethylene (ug/L) - TW7&8	09/09/2015	<MDL 0.2	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW3	09/09/2015	<MDL 0.1	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW5	09/09/2015	<MDL 0.1	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW6	09/09/2015	<MDL 0.1	No
2,3,4,6-Tetrachlorophenol (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
Triallate (ug/L) - TW3	09/09/2015	<MDL 10.0	No
Triallate (ug/L) - TW5	09/09/2015	<MDL 10.0	No
Triallate (ug/L) - TW6	09/09/2015	<MDL 10.0	No
Triallate (ug/L) - TW7&8	09/09/2015	<MDL 10.0	No
Trichloroethylene (ug/L) - TW3	09/09/2015	<MDL 0.1	No
Trichloroethylene (ug/L) - TW5	09/09/2015	<MDL 0.1	No
Trichloroethylene (ug/L) - TW6	09/09/2015	<MDL 0.1	No
Trichloroethylene (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
2,4,6-Trichlorophenol (ug/L) - TW3	09/09/2015	<MDL 0.1	No
2,4,6-Trichlorophenol (ug/L) - TW5	09/09/2015	<MDL 0.1	No
2,4,6-Trichlorophenol (ug/L) - TW6	09/09/2015	<MDL 0.1	No
2,4,6-Trichlorophenol (ug/L) - TW7&8	09/09/2015	<MDL 0.1	No
2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW3	09/09/2015	<MDL 10.0	No
2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW5	09/09/2015	<MDL 10.0	No
2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW6	09/09/2015	<MDL 10.0	No
2,4,5-Trichlorophenoxy acetic acid (ug/L) - TW7&8	09/09/2015	<MDL 10.0	No
Trifluralin (ug/L) - TW3	09/09/2015	<MDL 0.5	No
Trifluralin (ug/L) - TW5	09/09/2015	<MDL 0.5	No
Trifluralin (ug/L) - TW6	09/09/2015	<MDL 0.5	No
Trifluralin (ug/L) - TW7&8	09/09/2015	<MDL 0.5	No
Vinyl Chloride (ug/L) - TW3	09/09/2015	<MDL 0.2	No
Vinyl Chloride (ug/L) - TW5	09/09/2015	<MDL 0.2	No
Vinyl Chloride (ug/L) - TW6	09/09/2015	<MDL 0.2	No
Vinyl Chloride (ug/L) - TW7&8	09/09/2015	<MDL 0.2	No
<b>Distribution Water</b>			
Trihalomethane: Total (ug/L) Annual Average - DW	2016	11.3	No

## Maintenance Summary

OCWA uses a risk-based preventative maintenance framework that ensures assets are maintained to manufacturer's and/or industry standards. Maintenance is completed using various tools and operational supports. The Ottawa Valley Hub has specialized certified staff such as Millwrights, Electricians and Instrumentation Specialists to name a few.

OCWA uses a Workplace Maintenance System (WMS). WMS is a maintenance tracking system that can generate work orders as well as give summaries of completed and scheduled work. During the year, the operating authority at the facility generates scheduled work orders on a weekly, monthly and annual basis. The service work is recorded in the work order history. This ensures routine and preventive maintenance is carried out. Emergency and capital repair maintenance is completed and added to the system.

Capital projects are listed and provided to the Municipality of Mississippi Mills in the form of a "Capital Forecast". This list is developed by facility staff and provides recommendations for facility components requiring upgrading or improvement.

## Facility Maintenance Highlights

Work Order #	Details
105698	Capital Well #5 pump replacement
146844	Capital Well 8 IWS Well Inspection
170742	Capital Parts For Chlorination Panels
104650	Capital diaphragm flow control
105695	Capital Well 5 Redevelopment
105697	Capital Well 5 Camera troubleshooting
213249	Capital Well 7 & 8 Level indicators
26763	Capital Mississippi Mills Water Bristol SCADA upgrade
35978	Capital chlorine pump rebuild kits
36074	Capital air relief Well 5
36082	Capital well inspection repairs
49191	Capital changeover fasteners to s.s.well 3,5,6,7&8
49210	Capital Well 3,5,6,7&8 Building Maintenance
72831	Capital rebuild flow control valve
Municipality of Mississippi Mills	Asset Management Plan Updated in December;

## Distribution Highlights

The distribution system is operated by the Municipality of Mississippi Mills. Distribution highlights are provided to OCWA by the Municipality of Mississippi Mills.

### Maintenance and Operations:

- Water main flushing program completed;
- Valve turning program completed;
- Several repairs – valves, hydrants, services and curb stops;
- Initiated detailed design work for future water main replacements on Union Street South and Church Street;
- Environmental Assessment for Mid Term Water supply completed;
- New water mains commissioned on Mill Run Phase 1C Subdivision (Honeyborne Street) and Riverfront Phase 3 (Robert Hill Street, Merrithew Street and Spring Street).

### Planning Initiatives:

- DWWP & PTTW Amendment Wells 7 & 8 in 2017;
- Redevelopment and replacement of Well # 8 in 2017;
- Water and Wastewater Infrastructure Master Plan to be updated in 2017;
- Schedule 'C' Class EA - Water System Expansion in 2017;
- Watermain on Union Street in 2017;
- Radio Frequency Meter Upgrades;
- Engineering for future water and sewer works on Victoria Street in 2017;
- Purchase of a Valve Turner for Valve Exercising in 2017;
- Annual Infiltration and Inflow Program;
- Well Site Mechanical/Electrical/Instrumentation upgrades in 2017;
- Watermain replacement on Church Street.

## **Community Complaints**

- Community complaints are responded to by the Municipality of Mississippi Mills staff.

## **QEMS**

The Ontario Clean Water Agency has received Full scope accreditation. An on-site audit was conducted by a third party auditor and there were no non-conformances identified. An Internal Audit and Management Review were also completed. Minutes from the 2016 Management Review were provided to the Municipality.

## **Water Taking and Transfer Data**

2016 Data was submitted electronically on February 10, 2017 under permit #0568-9LUL2N. The confirmation and a copy of the submitted data are attached in Appendix A.

# Appendix A

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## **WTRS Data and Submission Confirmation**

Location: [WTRS](#) / [WT DATA](#) / [Input WT Record](#)

WTRS-WT-008

**Water Taking Data submitted successfully.****Confirmation:**

Thank you for submitting your water taking data online.

Permit Number: 0568-9LUL2N

Permit Holder: THE CORPORATION OF THE TOWN OF MISSISSIPPI MILLS.

Received on: Feb 10, 2017 9:04 AM

This confirmation indicates that your data has been received by the Ministry, but should not be construed as acceptance of this data if it differs from that specified on the Permit Number, assigned to the Permit Holder stated above.

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TOWN OF MISSISSIPPI MILLS | 2017/02/10

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## Mississippi Mills Drinking Water System Well 3 2016 Daily Raw Water Volumes

	January	February	March	April	May	June	July	August	September	October	November	December
1	249	277	124	171	161	277	302	352	472	371	325	342
2	180	233	161	92	183	252	241	357	389	356	330	255
3	295	182	151	144	240	260	263	306	346	339	383	319
4	231	202	152	183	209	331	359	369	376	302	370	382
5	196	210	204	130	241	163	351	317	440	343	381	274
6	298	139	151	143	198	212	349	376	382	369	403	249
7	275	217	165	154	208	258	362	214	347	303	354	264
8	393	193	214	78	189	294	289	224	332	300	309	321
9	287	235	171	144	215	279	287	338	339	300	269	233
10	242	176	168	167	285	245	261	0	332	339	303	249
11	248	190	174	78	258	184	290	0	327	283	229	323
12	329	208	173	75	188	257	361	0	363	333	265	235
13	217	254	182	0	256	268	328	0	338	320	285	245
14	280	243	160	0	400	262	347	0	328	301	267	313
15	256	238	159	0	360	260	298	0	389	331	334	241
16	225	199	117	0	263	344	250	9	364	308	273	242
17	240	217	144	0	299	319	443	0	326	315	320	282
18	209	147	162	0	244	338	319	0	315	289	256	272
19	263	243	102	0	225	338	289	0	339	260	291	232
20	265	150	142	33	220	317	389	0	316	336	312	305
21	209	148	180	23	236	385	355	0	335	312	286	398
22	211	85	114	19	233	271	370	507	375	356	267	234
23	239	145	147	0	389	476	443	304	279	408	276	237
24	159	197	102	0	225	390	313	320	323	332	359	228
25	263	152	144	0	298	359	264	289	339	344	357	266
26	268	325	159	0	278	376	338	346	384	296	295	216
27	307	375	111	111	218	313	240	330	322	339	324	225
28	254	2	152	92	280	300	258	329	334	308	300	238
29	319	89	122	160	275	341	369	364	390	319	346	236
30	230		180	232	295	390	309	414	341	318	380	211
31	291		90		265		309	374		313		216

## Mississippi Mills Drinking Water System Well 5 2016 Daily Raw Water Volumes

	January	February	March	April	May	June	July	August	September	October	November	December
1	195	287	154	228	0	271	0	0	0	0	69	256
2	140	241	258	121	0	248	0	0	0	0	240	217
3	192	173	193	191	0	253	0	0	0	0	91	246
4	197	208	318	238	33	317	0	0	0	43	0	298
5	155	217	270	163	13	154	0	0	0	0	0	219
6	239	141	199	196	0	199	0	0	0	4	0	202
7	209	225	219	209	0	237	0	0	0	0	11	214
8	225	201	308	105	0	266	0	0	0	0	339	261
9	153	253	263	194	0	255	0	0	0	0	256	188
10	201	181	226	229	188	226	0	0	0	0	226	201
11	187	200	229	106	283	172	0	0	0	48	171	262
12	46	223	229	250	217	238	0	0	0	0	200	191
13	56	268	241	156	241	273	0	0	0	0	199	200
14	174	258	209	110	485	300	0	0	0	0	199	258
15	64	261	207	214	438	320	0	0	0	0	128	198
16	193	222	149	239	280	354	0	0	0	0	141	200
17	211	242	181	217	369	1	0	0	0	0	240	237
18	24	214	203	256	272	0	0	0	0	26	174	230
19	101	291	95	173	262	0	0	0	0	172	218	198
20	27	180	195	171	275	0	0	0	40	174	234	264
21	136	301	113	223	296	0	0	0	0	20	214	216
22	193	252	147	204	288	0	0	0	0	0	201	208
23	222	180	192	230	472	0	0	0	0	0	207	211
24	151	249	131	204	285	0	0	0	0	0	268	208
25	242	195	190	230	355	0	0	0	0	17	252	244
26	265	402	207	104	307	0	0	0	0	0	220	204
27	306	470	145	0	239	0	0	0	1	0	247	213
28	211	287	200	0	302	0	0	0	3	45	225	227
29	169	224	159	0	289	0	0	0	2	0	258	228
30	230		232	0	303	0	0	0	0	0	284	204
31	297		119		264		0	0		0		214

	January	February	March	April	May	June	July	August	September	October	November	December
1	269	397	222	341	288	364	425	459	564	470	415	415
2	195	334	370	179	308	333	337	477	494	451	407	357
3	318	247	278	285	402	340	369	399	435	429	476	405
4	252	293	457	156	341	426	505	487	472	380	464	493
5	215	308	386	75	428	207	494	414	554	434	474	361
6	332	204	287	85	307	269	494	496	481	467	502	333
7	309	320	316	315	350	322	535	534	436	392	430	352
8	443	288	442	159	235	361	403	550	416	378	381	430
9	333	361	329	286	363	343	396	455	425	377	331	310
10	277	264	325	340	119	304	359	677	417	426	373	331
11	285	283	331	159	0	231	398	633	410	357	282	433
12	388	316	329	406	0	321	494	329	455	418	329	315
13	257	380	349	226	0	367	447	441	424	402	353	330
14	340	370	307	344	0	430	468	472	410	377	329	424
15	310	370	306	306	0	430	399	451	486	416	414	326
16	276	314	222	351	121	562	331	419	456	386	338	329
17	299	343	260	312	450	510	357	657	409	375	396	574
18	267	302	299	361	382	540	419	563	399	361	317	388
19	338	408	186	182	306	536	579	428	428	392	360	317
20	339	258	299	271	312	495	500	438	400	420	386	435
21	278	423	335	348	7	586	434	449	422	393	354	356
22	276	363	220	325	0	411	371	436	475	446	332	342
23	317	257	248	363	0	709	351	389	353	508	335	350
24	182	356	198	320	306	593	404	401	408	415	443	343
25	174	276	280	358	249	530	341	365	429	432	443	404
26	44	578	311	403	417	554	459	435	485	368	363	337
27	296	660	214	358	321	456	402	574	407	421	408	352
28	355	403	298	466	405	437	321	416	422	388	371	373
29	407	319	234	340	389	485	480	463	493	395	427	376
30	322		360	387	405	551	401	525	434	393	469	337
31	413		178		355		402	472		386		353

	January	February	March	April	May	June	July	August	September	October	November	December
1	406	558	340	561	428	526	553	617	812	786	683	732
2	291	514	666	296	460	477	438	625	775	753	690	620
3	475	380	424	469	619	484	480	537	730	718	808	704
4	377	467	536	579	494	611	657	656	791	634	785	856
5	320	487	587	402	638	295	643	557	935	723	804	626
6	491	324	432	460	453	384	643	668	807	782	853	578
7	461	509	478	496	513	288	697	719	735	652	733	610
8	520	456	663	251	423	475	525	741	703	630	653	746
9	496	536	496	459	533	449	515	613	711	630	568	538
10	415	416	506	536	662	395	468	851	696	709	642	575
11	464	444	531	252	577	301	518	853	689	590	483	752
12	616	494	539	647	493	809	642	706	760	696	565	546
13	408	591	579	360	511	478	585	594	709	671	606	573
14	541	574	507	542	66	241	614	635	686	630	566	737
15	492	569	501	485	0	559	526	606	815	693	710	565
16	434	483	373	556	0	732	438	563	761	644	581	572
17	467	526	432	494	0	667	472	612	684	660	681	674
18	373	463	503	628	0	703	554	757	667	604	543	657
19	374	629	317	428	388	699	504	647	717	550	615	567
20	525	394	489	420	482	644	673	588	672	706	660	725
21	419	635	552	549	531	759	621	603	689	648	604	602
22	422	551	353	498	516	535	489	586	757	745	558	593
23	482	455	454	560	849	815	472	505	591	854	573	614
24	327	537	307	492	513	772	544	539	685	697	723	595
25	532	416	440	552	624	690	459	491	718	729	758	701
26	573	897	484	648	595	722	617	585	537	619	621	584
27	650	999	333	547	460	594	542	540	680	711	698	610
28	541	624	426	707	580	568	451	559	707	649	636	649
29	621	489	376	519	554	631	646	623	831	667	730	653
30	492		574	576	583	718	540	703	718	666	809	586
31	625		290		506		541	635		653		613

	January	February	March	April	May	June	July	August	September	October	November	December
1	354	465	279	441	331	419	442	460	0	0	0	0
2	258	426	540	235	355	380	351	465	0	0	0	0
3	416	316	350	369	478	386	384	397	0	0	0	0
4	331	384	437	458	382	485	526	486	0	0	0	0
5	277	399	479	315	490	234	516	409	0	0	0	0
6	425	266	360	363	352	303	510	489	0	0	0	0
7	398	416	393	390	395	362	558	524	0	0	0	0
8	447	373	539	200	327	409	412	534	0	0	0	0
9	430	465	407	362	409	389	411	445	0	0	0	0
10	359	344	414	422	501	343	373	613	0	0	0	0
11	395	367	431	201	449	259	412	614	0	0	0	0
12	522	407	434	510	399	361	512	504	0	0	0	0
13	349	487	465	284	445	414	463	425	0	0	0	0
14	454	471	408	427	760	144	490	456	0	0	0	0
15	416	470	402	380	663	482	418	434	0	0	0	0
16	369	398	298	435	457	631	346	404	0	0	0	0
17	398	435	345	388	569	568	372	440	0	0	0	0
18	322	383	400	492	461	598	437	549	0	0	0	0
19	412	516	254	333	443	598	395	464	0	0	0	0
20	442	325	389	329	399	540	529	421	0	0	0	0
21	226	534	444	427	434	635	479	431	0	0	0	0
22	353	459	284	390	422	448	503	365	0	0	0	0
23	403	375	363	435	691	686	365	367	0	0	0	0
24	275	447	251	384	416	638	419	384	0	0	0	0
25	446	349	353	429	525	570	353	349	0	0	0	0
26	483	749	388	514	480	592	473	409	0	0	0	0
27	544	876	270	426	372	482	414	377	0	0	0	0
28	451	515	338	546	467	461	343	389	0	0	0	0
29	516	407	302	402	447	509	490	233	0	0	0	0
30	410		453	446	468	579	408	0	0	0	0	0
31	524		230		406		407	0		0		0