Municipality of

2005 ANNUAL COMPLIANCE REPORT

ON DRINKING WATER QUALITY

Certificate of Approval No. 4570-5PRNE9
Waterworks Identification No. W220000807

2005 ANNUAL SUMMARY REPORT FOR COUNCIL

INDEX

APPENDICES

2005 ANNUAL SUMMARY REPORT FOR COUNCIL

Summary Reports for Municipalities, Schedule 22 of O.Reg. 170/03, has been prepared to assist Brighton's Municipal Council in understanding the capability and operation of the drinking-water system and the quality of its water.

The report summarizes:

1. Brighton's Large Municipal Residential Drinking-Water System
2. Ontario Drinking-Water Systems Regulations
3. Requirements of the Regulations and System's Approvals
4. Upgrades Required to Correct Deficiencies
5. Brighton's Small Municipal Non-Residential Systems
   - 5.1 Codrington Community Centre Well Supply
   - 5.2 Hilton Hall Well Supply

1. BRIGHTON'S MUNICIPAL DRINKING WATER SYSTEM

1.1 Raw Water Source

In 2005, water sources at the Brighton Water Supply consisted of two spring fed reservoirs and three drilled wells. The surface water source consists of spring flows from a shallow aquifer which enter the two reservoirs, referred to as the Upper and Lower Reservoir. The reservoirs serve as collection galleries and settling basins for the springs. The second source of raw water is groundwater which is captured from a deep aquifer by drilled wells located adjacent to the Upper Reservoir site. There are three wells that draw water from the aquifer under the reservoir area: Well Nos. 1, 2 and 3 work on rotation. Well No.3 was developed in October/November 2002 and is now incorporated into the new groundwater supply system.

In 2005, the Upper Reservoir has been the main source of raw water supply, with Well #1 and the Lower Reservoir being utilized as supplementary sources, mainly during summer months. As part of Brighton's Turbidity Report-Action Plan and Implementation Schedule, mitigation measures included that the use of the Lower Reservoir be used only in emergency situations, pumping to waste until turbidity levels were below 1.0 NTU. As of October 14th, 2005, water was supplied to the new storage and treatment facility by the three groundwater wells.

The Brighton Water Supply Plant has been fortunate in having an excellent source of natural spring water as its main source of water supply. However, the reservoirs are regarded as a surface water source and new regulations require surface water be treated utilizing methods of filtration; also, all existing and future potable water storage structures must be completely covered to prevent contamination of stored water. The transition to a secure groundwater supply to meet O.Reg.170/03 and the Procedure for Disinfection of Drinking Water in Ontario included construction of the third well and a new storage facility. The work was completed and commissioned in October, 2005.

1.2 Treatment Process

Disinfection of water to eliminate disease-causing organisms is the most important step in the water treatment process. In October 2005 our new upgraded system came on-line which changed our system from an open surface water reservoir system to an enclosed concrete storage reservoir. This enables us to have more contact time for chlorination, this is done by injecting Chlorine gas into the water as it enters into one of two cells (*which is called Pre-Chlorination).*In the old system, which was an open reservoir system, the chlorine gas was injected into the water before it entered the ***Distribution System*** (DS) which did not allow for a enough contact time. A fail safe control system has been installed to ensure that an upward hydraulic gradient is maintained at all times in the raw water supply aquifer. This system includes water level sensors in each observation and production well, an alarm system equipped with pre-determined set-points for well depth, and a SCADA data-log system. The new concrete water storage reservoir is approximately 39 m x 58 m, and consists of two cells. Each cell is equipped with baffles and provides approximately 2800 m^3 of water storage and equipped with overflow, drain system, piping and appurtenances, and a watermain from the ***Water Treatment Plant*** (WTP) and reservoir to the existing distribution system (DS). A WTP building approximately 39 m x 10 m housing a primary and secondary disinfection system consisting of two (2) gas chlorinators, weigh scales, vacuum regulators, injectors and appurtenances to facilitate application of chlorine solution for pre-chlorination at a point where water enters either cell from the wells and also post-chlorination as water enters the DS. Instrumentation and controls including on-line chlorine residual analyzer and turbidity meters measure the chlorine residuals and turbidity in the reservoirs and the outlet to the DS. Emergency power is provided by a 15 KW standby power generator and a 80 KW trailer mounted standby generator including manually operated transfer switch. There is a drain/bypass line from the WTP and reservoirs to outfall through a bypass detention pond.

1.3 Distribution System

The Municipality of Brighton's distribution system provides drinking water to approximately 5,600 residents through a network of approximately 55 km. of piping and 2,400 residential and 170 commercial accounts. Fire hydrants are maintained by the Water Department, which includes a flushing program to flush out dead-ends; this practice maintains the water quality in the distribution system and assures the hydrants are in good repair. Chlorine residuals, as well as microbiological sampling and testing, in the distribution system are checked on a weekly basis. At least seven separate sites. Operators also test chlorine residuals on a daily basis in the distribution system as per O. Reg. 170/03.

Upgrades to the distribution system in 2005 included replacement of approximately 320 metres of 4" water main with 10" main at the east end of Elizabeth Street. Watermains were also replaced on Park Street and part of Division Street North between Park St. and Main St.

New municipal water and sewer rates were established based on cost-recovery of water and sewer services as per Ministry regulations; the new metered rates are being implemented as of January 1, 2005. At this point we have had a full year of metering, and can now figure out our accounted for and unaccounted usage of water.

In 2005, there were 76 water leaks in the distribution system of which 3 were repairs to watermain. Most of the water leaks were the cause of worn flared connection fittings and worn ½ inch copper services. There were a total of 54 water leaks in 2004

1.4 Consumption and Water Rates

Increases in monthly flows in the past years are directly associated with weather patterns where warmer temperatures and decreased precipitation are associated with higher daily flow demands by consumers (see Table 1). In 2005, a total of 937,827 m^3 of water was used. Although not the least amount of water used, it is a low consumption this could be a direct result of the rather wet summer experienced. Using an approximate population of 5,600 residents on the distribution system, the per capita for water consumption was 167 m^3/ person/year or 0.45 m^3 (450 Litres)/person/day. Based on 2005 consumption, the average daily demand was 2,545 m^3/day; the average daily demand represents the average quantity of water treated at the water treatment plant. Peak day demand represents the highest volume of water treated over a given 24-hour period, usually the hottest day of the year but it could also include fire suppression usage. This occurred on August 7th, 2005 at 4,087 m^3/day.

In 2005, the Bulk Water Facility was utilized by six water suppliers as well as for municipal projects for a total of 691,363 imp.gal. (3,143 m^3) which is about 0.3% of the total annual flow. There were also sales at the ***Municipal Public Water Dispenser***, which accounted for 70.23 m^3 usage @ $2 for 19 liters for a sale of $6,371.00 in 2005.

On December 20, 2004, Council passed By-law Number 274-2004, which included the new metered water rates for 2005. The by-law enacts the rules and regulations for the installation, repair, maintenance, and access to the Water Supply System and appurtenant water meters, sanitary and storm sewer services and related appurtenances; the billing and collection of charges for water and sewer usage; and the penalties for offences of the water and sewer works in the Municipality of Brighton.

As part of the Municipality of Brighton's water conservation policy, the Water Conservation By-law No. 029-2001, is enforced annually from June 1st to September 15th. This by-law is maintained to regulate and restrict the unnecessary use of water for outdoor purposes within the serviced area. Staff monitor and enforce compliance to this by-law during the period that it is in effect.

Table I

WATER CONSUMPTION / FLOWS (m^3)							
MONTH	**YEAR**						
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
January	75,412	72,587	76,773	69,912	78,265	71,970	70,952
February	71,509	69,546	63,693	62,483	70,877	68,580	71,484
March	78,463	72,742	77,381	68,314	75,369	79,259	69,759
April	75,242	71,145	73,377	67,718	70,619	72,723	61,223
May	110,918	78,663	115,800	69,653	80,476	79,911	69,198
June	106,009	73,502	89,667	79,769	86,909	89,335	89,504
July	107,686	89,045	114,793	111,753	98,759	87,648	91,527
August	87,223	88,935	115,775	106,421	96,356	86,528	89,244
September	87,737	88,009	88,386	95,634	90,002	78,125	82,643
October	73,627	73,993	78,357	73,716	75,261	76,815	81,680
November	68,010	69,053	73,073	75,738	72,510	74,115	80,713
December	68,524	69,793	73,704	83,509	70,377	72,995	79,890
Total Flow	917,013	917,013	1,040,779	964,620	965,781	938,004	937,827
Monthly Avg.	84,197	76,418	86,732	80,385	80,482	77,908	78,152
Monthly Max.	110,918	89,045	115,800	111,753	98,759	89,335	91,527
Monthly Min.	68,010	69,053	63,693	62,483	70,377	68,580	61,223

YEAR	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Annual avg. daily flow m^3/day	2,768	2,512	2,851	2,643	2,645	2,562	2,545
Max.daily flow m^3/day	4,926	4,027	4,787	4,958	4,656	3,733	4087
Rated Capacity	6,445	6,445	6,445	6,445	6,445	6,445	6445
%max.day rated capacity	76%	62%	74%	77%	72%	58%	63%
% annual avg. daily flow m3/day	43%	39%	44%	41%	41%	40%	39%

2. Ontario Drinking Water-Systems Regulations

2.1 THE SAFE DRINKING WATER ACT, 2002

The purpose of the Act is to gather in one place all legislation and regulations relating to the treatment and distribution of drinking water, to protect human health through the control and regulation of drinking-water systems and drinking –water testing. The new Drinking Water Systems Regulation and its supporting regulations can be found at www.ene.gov.on.ca. The Safe Drinking Water Act will be incorporating a statutory standard of care, whereby every director and officer of a corporation (including municipal councilors) that owns a municipal drinking water system has a duty to take all reasonable steps to prevent any user of the system from being exposed to an unreasonable health risk that may arise from their consumption of drinking water. With this, municipal officials are expected to be informed of their drinking water system and acquainted with drinking-water legislation and regulations.

On May 14, 2004 Ministry of the Environment filed a new certification regulation for operators of municipal and regulated non-municipal drinking water systems, titled *O.Reg. 128/04 Certification of Drinking-Water System Operators and Water Quality Analysts* under the *Safe Drinking Water Act, 2002*: This new regulation ensures tougher certification and training rules for water system operators based of the classification of the Municipal Residential System. This regulation explains operating standards for Municipal Residential Subsystems and Limited Subsystems that are to be followed and maintained by the owner or operating authority of the subsystem including record-keeping re: operation of the subsystem, operation and maintenance manuals, operator training, and duties of the operator-in-charge.

2.2 THE DRINKING WATER PROTECTION REGULATION (O.Reg.170/03)

Effective June 1, 2003, the Drinking Water Protection Regulation (O.Reg. 170/03) replaced the Drinking Water Protection Regulation for larger Waterworks (O.Reg. 459/00). Regulation 170/03 sets water treatment standards for a variety of water systems and includes a number of supporting regulations, including the Drinking Water Quality Standards Regulation (O.Reg. 169/03) which prescribes standards for 161 physical/chemical, microbiological and radiological parameters.

2.3 SUSTAINABLE WATER AND SEWAGE SYSTEMS ACT, 2002

Helps ensure clean, safe drinking water for Ontario residents by making it mandatory for municipalities to assess and cost-recover the full amount of water and sewer services. A report to the Ministry on the full cost of water and wastewater services is to include a cost recovery plan for operating costs, source protection costs, financing costs, renewal and replacement costs and improvement costs associated with treating and distributing water to the public.

2.4 DEFINITIONS

Accredited Lab, all laboratories that test drinking water must be accredited for the tests they perform by the Standards Council of Canada or its equivalent. Accreditation involves performance testing and auditing to ensure that laboratories follow appropriate procedures using acceptable methods.

Chlorine Residual – chlorine residual in water is a component of chlorine after the initial disinfection or chlorine demand has been satisfied. The maintenance of a chlorine residual in the distribution system is intended to keep a persistent disinfectant residual to protect the water from microbiological re-contamination and serve as an indicator of distribution system integrity.

GUDI **G**roundwater **U**nder **D**irect **I**nfluence of Surface Water – in some groundwater supplies, situations may exist where contaminants typically found on the ground or in surface water, such as a lake or river, find their way into the groundwater and can be pumped from the well into the water distribution system. Such a system is referred to as Groundwater Under Direct Influence of Surface Water or GUDI. This can be caused by a number of different factors including the geology surrounding a well, insufficient travel time between the well intake and surface water or a defect in the well. A true groundwater supply would normally be free of harmful microbiological contaminants and reflect only disinfection be provided as a minimum level of treatment along with a minimum chlorine residual after 15 minutes contact time.

MAC Maximum Acceptable Concentration – This is a health-related Ontario drinking water standard established for contaminants that have known or suspected adverse health effects when above a certain concentration. The length of time the MAC can be exceeded without injury to health will depend of the nature and concentration of the parameter.

IMAC Interim Maximum Acceptable Concentration – This is a health related Ontario drinking water standard established for contaminants when there are insufficient toxicological data to establish a MAC with reasonable certainty, or when it is not practical to establish a MAC at the desired level.

Inorganic parameters – substances such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production mining, farming, or domestic plumbing.

OG Operational Guidelines are established for parameters that need to be controlled to ensure efficient and effective treatment and distribution of water.

mg/L milligrams per litre is a measure of concentration of a parameter in water, sometimes called parts per million (ppm).

µg/L micrograms per litre is a measure of concentration of a parameter in water, sometimes called parts per billion (ppb).

Parameter is a substance that is sampled and analyzed in the water.

Potable Water is water from ground or surface sources this supplied for human consumption.

Raw Water – water entering the treatment plant prior to any chemical addition. Raw water sampling and analysis provides a measure of source water quality which allows assessment

and adjustment of treatment process; information on the source of any contaminants; and long term trends in source water quality.

Total Trihalomethanes (THM) – are the most widely occurring synthetic organics found in chlorinated drinking water. The principal source of Trihalomethanes is the action of chlorine with naturally occurring organics (material that comes from plant or animal sources). The maximum acceptable concentration for THM is 0.10 mg/L based on four quarter moving annual average test results, tested at a remote point site in the distribution system.

Turbidity – turbidity in water is caused by the presence of suspended matter such as clay, silt and microscopic organisms and is commonly present in the source water as a result of soil runoff. The substances and particles that cause turbidity can be responsible for interference with disinfection, can be a source of disease-causing organisms, and can shield pathogenic organisms from the disinfection process.

Treated Water is source water that has been altered in order to disinfect and ensure treatment has producing water of equal or better quality.

3 Requirements of the Drinking-Water System Regulation

***3.1 Sample & Test* drinking water in a frequency designed to reflect the type and user of the system. Specific requirements for each category differ depending on the size and population served.**

- Category of System - Brighton Water Supply System is categorized as **Large Municipal Residential**, which is defined as a municipal drinking water system that serves a major residential development of more than 100 private residences.
- Sampling & Testing requirements for a Large Municipal Residential drinking water system state that the owner of the drinking-water system and the operating authority for the system shall ensure samples be tested for the following:
  - Microbiological – O.Reg. 170/03 Schedule 10 requires at least eight distribution samples, plus one additional distribution sample for every 1,000 people served by the system, are taken every month, with at least one of the samples being taken each week. With this, 13 treated distribution samples would be required monthly. Brighton currently samples at least 5 distribution samples weekly or approximately 20 samples monthly. These samples are tested for Escherichia coli or fecal coliforms and total coliforms, and 25% of the samples are tested for general bacteria populations expressed as background colony counts on the total coliform membrane filter or as colony counts on a heterotrophic plate count. Raw water samples are required to be tested at least once every week from the drinking-water system's raw water before any treatment is applied to the water. Raw water was sampled weekly from the upper reservoir & lower reservoir and from Well #1, Well #2 and Well #3, when in service.

Table 2-Microbiological Sampling & Testing-Large Municipal Residential

Source	**Jan.**	**Feb.**	**Mar.**	**Apr.**	**May**	**Jun.**	**Jul.**	**Aug.**	**Sep.**	**Oct.**	**Nov.**	**Dec.**	**Total**
Upper Reservoir	4	4	5	4	5	4	4	5	4	2	Decom	Decom	42
Lower Reservoir	4	4	5	4	5	4	4	5	4	2	Decom	Decom	42
Well #1	4	4	5	4	5	4	4	5	4	4	4	4	52
Well #2	4	4	5	4	5	4	4	5	4	4	4	4	52
Well #3	0	0	0	0	0	0	0	0	0	0	0	2	2
Total Raw Samples	16	16	20	16	20	16	16	20	16	12	8	10	190
POE (Point of Entry)	4	4	5	4	5	4	4	5	4	4	5	4	52
Distribution System	20	20	20	25	20	20	28	23	28	19	19	25	271
Total Treated Samples	24	24	31	24	27	30	24	30	24	24	34	28	324

Microbiological Results	**Number of Samples**	**Range of E.Coli Results**	**Range of Total Coliform Results**	**Number of HPC Samples**	**Range of HPC Results**
Raw	190	<1 - 238	<1 - >400	0	
POE-Chlorine Station	52	Absent	Absent	0	<10 - 20
Distribution	324	<1	<1	104	<10 - 40

- Chemical Sampling & Testing – O.Reg. 170/03 Schedule 13 requires Large Municipal Residential Systems be tested for the following:
  - (i) Inorganics (Schedule 23) be tested at least every 12 months if the system obtains water from a raw water supply that is surface water. Note that once the water system switches to groundwater (wells) then sampling for organic/ inorganic parameters can be reduced to every 36 months.
  - (ii) Lead - at least one sample in the distribution system is taken every 12 months from a point in the drinking-water system's distribution system or in plumbing that is connected to the drinking-water system that is likely to have an elevated concentration of lead.
  - (iii) Organics – if the system obtains water from a raw water supply that is surface water, at least one water sample is taken ever 12 months. When the raw water source is groundwater (wells) then at least one water sample must be taken every 36 months.
  - (iv) Trihalomethanes – at least one distribution sample is taken every three months from a point in the drinking-water system that is likely to have an elevated potential for the formation of trihalomethanes.
  - (v) Nitrate and Nitrite, one water sample taken every three months.
  - (vi) Sodium, one water sample taken every 60 months.
  - (vii) Fluoride, one water sample taken every 60 months.

See Appendix I – Part III Form 2 for Brighton's Annual Report electronic submission to MOE; there were no exceedances of organic or inorganic parameters tested during this period.

3.1 Use an Accredited Laboratory

Drinking-water systems must use a licensed laboratory as outlined in the Drinking Water Testing Services Regulation (O.Reg.248/03) which became law in June 2003.

- Laboratory Services Notification Forms O.Reg. 170/03 were completed and submitted to the Ministry of Environment. Confirmation that Caduceon Laboratories in Kingston, Nepean, and Ottawa as well as Lakefield Research are listed with The Standards Council of Canada as an accredited lab was made. Notifications were sent to the labs to ensure clear and complete notification is reported when adverse water quality incidents may be reported.

3.2 Report adverse test results that exceed any of the standards in Schedules 1, 2, 3 (other than fluoride) in the Ontario Drinking Water Quality Standards (O.Reg.169/03) verbally and in writing to both the local Medical Officer of Health and the Ministry of the Environment.

- On June 8th, 2005 the lab notified us of a P/A (present/absent) Total Coliforms, a resample was done and came back negative for Total Coliforms.

3.3 Obtain a Certificate of Approval and a Permit To Take Water for a municipal residential drinking-water system from the ministry. *In the future, approval will be replaced with municipal drinking-water system licenses and drinking-water works permits. In order to obtain a licence, an owner will be required to have an operational plan approved by the ministry, an accredited operating authority, financial plans, a permit to take water and a drinking water works permit.*

Brighton Water Supply System's Approvals include:

1) Certificate of Approval Number 5482-6FJQH dated the 25th day of August, 2005 amended the previous certificate by extending the completion date to October 31st, 2005, for upgrades of the drinking-water system to comply with O.Reg. 170/03 and Procedure for Disinfection of Drinking Water in Ontario. Commissioning of the new facility was completed in accordance with the current certificate.

2) PTTW No. 92-P-3067, which expired December 31, 2004, authorized the municipality to withdraw water from the Wells #1 and 2, and the reservoirs at the following maximum flow rates:

Well No. 1	1,591 L/min or 2,151,360 L/day
Well No. 2	1,591 L/min or 2,151,360 L/day
Upper Reservoir	2,100 L/min. or 3,024,000 L/day
Lower Reservoir	1,800 L/min. or 2,592,000 L/day

PTTW No. 1588-68YQ6P was issued to the Municipality on January 25, 2005 and extended the terms of PTTW 92-P-3067, and the withdrawal of water from the

existing two wells and upper and lower reservoir until the new plant was commissioned.

3) Permit to Take Water No. 2001-62MNU2 was issued to the municipality on September 27, 2004 and authorizes the withdrawal of water from each of the production wells Nos. 1, 2 and 3 at a maximum rate of 1,494 L/min. or about 2,151,360 L/day.

3.3 Have certified operators or trained persons, depending on category of system.

Certified Operators include:

Mike Ryckman, Overall Responsible Operator, Supervisor, WDII
Mark Alexander, WDII
Keith Lee, WDI
Jeremy Hinze, OIT

Operator training requirements, under the new O. Reg. 128/04 state that in the transition from O.Reg. 435/93, at least 40 hours of training are required by July 31, 2005. In each of the two years that begin on August 1, 2005 and end of July 31, 2007, the annual number of hours of training required under Section 29 in each year will be a total of 35 hours of which 12 hours or more are continuing education and the remaining hours as on-the-job practical training.

3.4 Prepare an annual report in order that the public has access to information on the status of drinking water.

Annual reports are prepared in accordance with O.Reg.170/03. Drinking water reports are available at both municipal offices and the municipal website; the public is informed via newspaper when it is available. The Annual Report on Drinking Water must be passed by Resolution of Council.

3.5 Prepare an Annual Summary Report, on municipal residential systems for municipal Councillors, members of a municipal service board, or the board of directors of municipal business corporations, as appropriate.

This report must include information regarding the requirements of the Act (Section 3.1 of this report), the regulations (Section 2), the System's approval (Section 3.4) and any order that the system failed to meet during the period of the report noting the duration of the failure and the measures taken to correct the failure. The report must also include flow rates of the water supplied during the period including monthly average, maximum daily flows, and the rated capacity for the purpose of assessing the capability of the system (Table 1), and daily instantaneous peak flow rates (Appendix III). The report must include information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and future planned uses of the system.

4 Upgrades to the Drinking-Water System to Correct Deficiencies.

1. All Wells have new submersible pumps rated for 29.4 L/min, and are now operational. All wells are connected to the raw water transmission line supplying the new Water Treatment Plant and Storage Reservoir.

2. Replacement of existing open spring fed water reservoirs with a 5,600 m^3 concrete reservoir consisting of two baffled cells. This will provide more than the 15 minute contact time prior to first usage currently not being met. Ministry requirements state that all existing and future potable water storage structures shall be completely covered to prevent contamination of the stored water. The control building and storage/treatment facility was completed in November 2005.

3. Install new instrumentation and monitoring equipment controlled by a SCADA system has the capability to monitor daily peak flows, and max., min., and mean for continuous monitoring of turbidity and chlorine residuals as per regulations.

4. Chlorine Rooms must have a Chlorine Detector Alarm System – included in the plans at the new plant.

5. Commissioning date of the new Brighton Water Treatment Plant was extended to October 31, 2005.

5. Small Municipal Non-Residential Systems

Community centers such as Codrington Community Centre and Hilton Hall are categorized as Small Municipal Non-Residential which is defined as a municipal drinking water system that does not serve a residential development, is not capable of supplying drinking water at a rate of more than 2.9 litres per second, and serves a designated facility or public facility.

On June 3rd, 2005, ***Ontario Regulation 252/05*** replaced 170/03 for Small Municipal Non-Residential systems, which includes rural community halls such as Codrington Community Centre and Hilton Hall. The new regulation reduces the financial burden on owners but maintains a high level of public health protection. Only microbiological sampling of *E. coli* and total coliforms is required. Installation of treatment equipment is no longer required and annual reporting is no longer required.

5.1 Codrington Community Centre Well Supply

Microbiological and chemical sampling is being done weekly at the Codrington Community Centre. There is no treatment at this site, adverse water quality tests have come up positive twice in 2005, and has been reported to MOH/Spills Action/MOE. Annual sampling of organic and inorganic parameters was performed in December 2005. Quarterly samples for nitrate and nitrite were tested in 2005.

1. July 20, 2005, Total Coliform count exceeded limits set by MOE, sample was recorded at 1 Total Coliform, the limit is 0, after Chlorinating, flushing and resampling the sample came back <1. MOH/Spills Action/MOE were contacted.

2. August 31, Total Coliform count exceeded limits set by MOE, sample was recorded at 1 Total Coliform, the limit is 0, after Chlorinating, flushing and resampling the sample came back <1. MOH/Spills Action/MOE were contacted.

See Appendix for Codrington Community Centre Annual Report which must be submitted electronically to the Ministry of Environment.

5.2 Hilton Hall Well Supply

Hilton Hall has UV disinfection and filtration, some microbiological sampling was performed on a weekly basis. Quarterly sampling of nitrite and nitrate were also performed. There were two adverse water quality notifications by Caduceon Lab from Hilton Hall Well Supply System during the period of this report which were negative when resampled.

1. March 9, a Back Ground count of 585 war reported, the MOE limit is 500, MOH/Spills Action/MOE were all notified of the report, Chlorinating, flushing and resampling ; the test came back clear.

2. Positive Total Coliform Count of 48 on December 14; corrective action included reporting to MOH/Spills Action/MOE, Chlorinating, flushing and resampling ; the test came back clear.

See Appendix for Hilton Hall Well Supply Annual Report which must be submitted electronically to the Ministry of Environment.

6. Conclusion

With the completion of the new enclosed storage reservoir, control building, state of art monitoring and testing equipment, and installation of another supply well in 2005, the Brighton water supply and distribution system has achieved full compliance with our Certificate of Approval and Ontario Regulation 170/03. The new facility is expected to accommodate the needs of the community for many years.

The Brighton Water Department is proud of its water quality and is committed to providing the safe and reliable water supply.

Apendix 1

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	ANNUAL
FLOWS maximum demand/day 6,445 m3/day as per Certificate of Approval													
TOTAL FLOWS (m^3)	70,952	71,484	69,759	61,233	69,198	89,504	91,527	89,244	82,643	81,680	80,713	79,890	937,827
DAILY AVG. FLOW (m^3)	2,289	2,465	2,250	2,041	2,232	2,983	2,953	2,879	2,755	2,428	2,690	2,577	2,545
MINIMUM DAILY FLOW (m3)	2,140	2,273	2,082	1,801	1,795	1,816	2,075	2,098	3,538	2,136	2,441	2,152	1,795
MAXIMUM DAILY FLOW (m^3)	2,538	2,742	2,698	2,365	2,980	3,654	3,772	4,087	2,179	2,696	3,001	2,678	4,087
% MAXIMUM RATED CAPACITY	39%	43%	42%	37%	46%	57%	59%	63%	34%	42%	46%	41%	46%
AVERAGE FLOW RATE / *Source*	*Upper Res.*	*Upper Res.*	*Upper Res.*	*Upper Res.*	*Upper Res.*	*Upper Res,Well#1*	*Up&Low Res,Well#1*	*Upper Res,Well#1*	*Upper Res,Well#1*	*Upper Res,Well#1*	*New Water Plant*	*New Water Plant*	
AVG. DAILY FLOW RATE (L/min)	1,590	1,712	1,563	1,417	1,550	2,072	2,051	1,999	1,913	1,686	2,690	2,448	1,891
MAX. DAILY FLOW RATE (L/min)	1,763	1,904	1,874	1,642	2,069	2,538	2,619	2,838	1,513	1,872	2,956	2,678	2,189
Maximum flow rate 2,100 L/min Upper Reservoir + 1,591 L/min Well #1 as per C of A													
CHLORINE CONSUMPTION													
TOTAL USED (kg)	82.70	85.00	89.60	83.00	77.00	99.80	122.00	133.40	108.20	127.80	108.60	102.40	1,219.50
DAILY AVERAGE (kg)	2.70	3.04	2.89	2.77	2.48	3.33	3.90	4.30	3.61	3.95	3.60	3.30	3.32
AVERAGE DAILY DOSAGE (mg/L)	1.22	1.19	1.29	1.37	1.14	1.13	1.36	1.47	1.33	1.51	1.68	1.69	1.37
CHLORINE RESIDUALS (monthly range mg/L)													
FREE CHLORINE (POE)	0.38-1.52	0.48-1.48	0.79-1.15	0.80-1.60	0.82-1.20	0.62-1.11	0.81-1.40	0.63-1.54	0.84-1.41	1.38-1.71	1.04-205	0.94-1.15	1.09
FREE CHLORINE (Dist.System)	0.77-1.17	0.80-1.20	0.32-0.92	0.32-0.76	0.30-0.97	0.33-1.17	0.36-1.96	0.50-1.38	0.50-1.01	1.00-1.40	0.52-1.74	0.74-1.20	0.85
NOTE: POE measured by on-line instrumentation / Distribution measured by operator's using HACH kit.													
TURBIDITY (NTU) Point of Entry													
MONTHLY AVERAGE	0.230	0.310	0.298	0.242	0.186	0.240	0.190	0.130	0.120	0.100	0.120	0.110	0.190
range	0.12-0.54	0.16-1.08	0.16-2.00	0.08-1.48	0.08-0.84	0.08-1.24	0.02-0.74	0.08-0.20	0.04-0.28	0.06-0.40	0.18-2.00	0.20-0.55	
CONDUCTIVITY	281-332	291-315	114-312	166-364	197-382	349-382	335-360	324-373	304-342	309-349	no longer used	no longer used	
pH Point of Entry													
MONTHLY AVERAGE	8.2	8.3	7.9	7.7	7.7	7.5	7.3	7.2	7.2	7.3	7.6	7.6	7.6
COLOUR (TCU) Point of Entry													
MONTHLY AVERAGE	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TEMPERATURE (°C.) Point of Entry													
MONTHLY AVERAGE	7.0	7.0	7.0	10.0	10.5	12.8	14.0	13.5	13.0	12.8	12.0	11.0	10.9

Appendix 2

Drinking-System Regulations O.Reg. 170/03

Part III Form 2

Section 11. ANNUAL REPORT.

Drinking-Water System Number:	220000807
Drinking-Water System Name:	**Brighton Water Supply System**
Drinking-Water System Owner:	**Corporation of the Municipality of Brighton**
Drinking-Water System Category:	**Large Municipal Residential**
Period being reported:	**January 1-December 31, 2005**

Complete if your Category is Large Municipal Residential or Small Municipal Residential	*Complete for all other Categories.*
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X] Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ] Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection. Municipal Offices: 35 Alice St., Brighton 67 Sharp Rd. Brighton	Number of Designated Facilities served: Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ] Number of Interested Authorities you report to: Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]

List Drinking-Water Systems, which receive all of their drinking water from your system:

Presqu'ile Provincial Park – Parks Ontario

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
Yes [X] No [ ]
Indicate how you notified system users that your annual report is available, and is free of charge.
[X] Public access/notice via the web
[X] Public access/notice via Government Office
[X] Public access/notice via a newspaper
[X] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method _____

Describe your Drinking-Water System

In 2005, during the period January 1st to October 31st, the water works include Surface Water Source from 2 spring fed reservoirs, the lead source is Upper Reservoir, supplemented by the Lower Reservoir or drilled wells. Two wells PW1-90 and PW2-90 may be used having the flow pumped directly to the Upper Reservoir. Water is chlorinated as it enters the distribution system, there is no other treatment i.e. filtration provided. Treated water is gravity fed to the distribution system. On October 31st, 2005, the new Water Supply and storage system was commissioned, which included a third production well to provide all water from ground sources. The new system also includes ; water level sensors in each observation and production well, an alarm system equipped with pre-determined set-points for well depth, and a SCADA data-login system. A concrete reservoir, approximately 38 m x 58 m consisting of two cells, each cell is equipped with baffles providing approximately 2,800 m3 (each cell) storage, equipment with overflow, drain system, piping and appurtenances, and a watermain from the ***Water Treatment Plant*** (WTP) and reservoir to the existing distribution system (DS). A WTP building housing a primary and secondary disinfection system consisting of two (2) gas chlorinators, weigh scales, vacuum regulators, injectors and appurtenances to facilitate application of chlorine solution for pre-chlorination at a point where water enters either reservoirs from the wells and post chlorination as water enters the DS; instrumentation and controls including on-line chlorine residual analyzer and turbidity meters measure the chlorine residuals and turbidity in the reservoirs and the outlet to the DS; a 15 KW standby power unit and a 80 KW trailer mounted standby generator including manually operated transfer switch; and a drain/bypass line from the WTP and reservoirs to outfall through a bypass detention pond. Classified as Water Distribution 2.

List all water treatment chemicals used over this reporting period

Chlorine Gas

Were any significant expenses incurred to?

- [ ] **Install required equipment**
- [ ] **Repair required equipment**
- [ ] **Replace required equipment**

2 Describe

New storage reservoir completed, in service as of October 14, 2005

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre?

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
June 8/05	P/A Total Coliforms	1	cc	Resample & retest	June 9, 2005

Microbiological testing done under section 8 (2) during this reporting period

	Number of Samples	Range of E.Coli or Fecal Results (#-#)	Range of Total Coliform Results (#-#)	Number of HPC Samples	Range of HPC Results (#-#)
Raw	**190**	**<1 - 238**	**<1->400**	**0**	
Treated	**52**	**absent**	**<1 -1**	**0**	**<10-20**
Distribution	**324**	**<1**	**<1**	**104**	**<10-40**

Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (#-#)
Turbidity	8760	0.02-2.00 ntu's
Chlorine	8760	0.38-2.05
Fluoride **(If the DWS provides fluoridation)**		

NOTE: For continuous monitors use 8760 as the number of samples.

NOTE: ***Record the unit of measure if it is*** *not* ***milligrams per litre.***

Summary of additional testing and sampling carried out in accordance with the requirement of an approval or order.

Date of order or C of A	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or most recent

3 Parameter	4 Sample Date	Result Value	5 Unit of Measure	6 Exceedance
Antimony	Dec 13/05	<0.001	mg/L	No
Arsenic	Dec 13/05	0.002	mg/L	No
Barium	Dec 13/05	0.075	mg/L	No
Boron	Dec 13/05	0.006	mg/L	No
Cadmium	Dec 13/05	<0.0001	mg/L	No

5.1 Chromium	Dec 13/05	<0.002	mg/L	No
5.1 Lead	Dec 13/05	<0.0002	mg/L	No
Mercury	Dec 13/05	<0.00006	mg/L	No
Selenium	Dec 13/05	<0.001	mg/L	No
Uranium	Dec 13/05	0.0006	mg/L	No
Fluoride	Dec 13/05	<0.1	mg/L	No
Nitrite	Dec 13/05	<0.1	mg/L	No
Nitrate	Dec 13/05	3.3	mg/L	No

Summary of Organic parameters sampled during this reporting period or most recent

Parameter	**7 Sample Date**	**Result Value**	**8 Unit of Measure**	**9 Exceedance**
Alachlor	Dec 13/05	<0.3	µg/L	no
Aldicarb	Dec 13/05	<3	µg/L	no
Aldrin + Dieldrin	Dec 13/05	<0.02	µg/L	no
Atrazine + metobolites	Dec 13/05	<0.5	µg/L	no
Azinphos-methyl	Dec 13/05	<1	µg/L	no
Bendiocarb	Dec 13/05	<3	µg/L	no
Benzene	Dec 13/05	<0.5	µg/L	no
Benzo(a)pyrene	Dec 13/05	<0.005	µg/L	no
Bromoxynil	Dec 13/05	<0.3	µg/L	no
Carbaryl	Dec 13/05	<3	µg/L	no
Carbofuran	Dec 13/05	<1	µg/L	no
Carbon Tetrachloride	Dec 13/05	<0.2	µg/L	no
Chlordane (Total)	Dec 13/05	<0.04	µg/L	no
Chlorpyrifos	Dec 13/05	<0.5	µg/L	no
Cyanazine	Dec 13/05	<0.5	µg/L	no
Diazinon	Dec 13/05	<1	µg/L	no
Dicamba	Dec 13/05	<5	µg/L	no
1,2-Dichlorobenzene	Dec 13/05	<0.1	µg/L	no
1,4-Dichlorobenzene	Dec 13/05	<0.2	µg/L	no
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Dec 13/05	<0.1	µg/L	no
1,2-Dichloroethane	Dec 13/05	<0.1	µg/L	no
1,1-Dichloroethylene (vinylidene chloride)	Dec 13/05	<0.1	µg/L	no
Dichloromethane	Dec 13/05	<0.3	µg/L	no
2-4 Dichlorophenol	Dec 13/05	<0.1	µg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	Dec 13/05	<5	µg/L	no
Diclofop-methyl	Dec 13/05	<0.5	µg/L	no
Dimethoate	Dec 13/05	<1	µg/L	no
Dinoseb	Dec 13/05	<0.52	µg/L	no
Diquat	Dec 13/05	<5	µg/L	no
Diuron	Dec 13/05	<5	µg/L	no
Glyphosate	Dec 13/05	<25	µg/L	no
Heptachlor + Heptachlor Epoxide	Dec 13/05	<0.1	µg/L	no
Linadane (Total)	Dec 13/05	<0.1	µg/L	no
Malathion	Dec 13/05	<5	µg/L	no
Methoxychlor	Dec 13/05	<0.1	µg/L	no
Metolachlor	Dec 13/05	<3	µg/L	no

Metribuzin	Dec 13/05	<3	µg/L	no
Monochlorobenzene	Dec 13/05	<0.2	µg/L	no
Paraquat	Dec 13/05	<1	µg/L	no
Parathion	Dec 13/05	<3	µg/L	no
Pentachlorophenol	Dec 13/05	<0.1	µg/L	no
Phorate	Dec 13/05	<0.3	µg/L	no
Picloram	Dec 13/05	<5	µg/L	no
Polychlorinated Biphenyls(PCB)	Dec 13/05	<0.05	µg/L	no
Promethyne	Dec 13/05	<0.1	µg/L	no
Simazine	Dec 13/05	<0.5	µg/L	no
THM (**NOTE**: **show latest quarterly average-10.8**) Avg. 11.2	Dec 13/05	6.7	µg/L	no
Temephos	Dec 13/05	<10	µg/L	no
Terbufos	Dec 13/05	<0.4	µg/L	no
Tetrachloroethylene	Dec 13/05	<0.2	µg/L	no
2,3,4,6-Tetrachlorophenol	Dec 13/05	<0.1	µg/L	no
Triallate	Dec 13/05	<10	µg/L	no
Trichloroethylene	Dec 13/05	<0.1	µg/L	no
2,4,6-Trichlorophenol	Dec 13/05	<0.1	µg/L	no
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Dec 13/05	<10	µg/L	no
Trifluralin	Dec 13/05	<0.5	µg/L	no
Vinyl Chloride	Dec 13/05	<0.2	µg/L	no

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample

(Only if category is large municipal residential, small municipal residential, large municipal non residential, small municipal non residential, large non municipal non residential)

Appendix 3

Drinking-System Regulations O.Reg. 170/03

Part III Form 2
Section 11. ANNUAL REPORT.

Drinking-Water System Number:	260033813
Drinking-Water System Name:	**Codrington Community Centre Well Supply**
Drinking-Water System Owner:	**The Corporation of the Municipality of Brighton**
Drinking-Water System Category:	**Small Municipal Non Residential**
Period being reported:	**January 1-December 31, 2005**

Complete if your Category is Large Municipal Residential or Small Municipal Residential	*Complete for all other Categories.*
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [ ] Is your annual report available to the public at no charge on a web site on the Internet? Yes [ ] No [ ] Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Number of Designated Facilities served: 0 Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ] Number of Interested Authorities you report to: 0 Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]

List Drinking-Water Systems, which receive all of their drinking water from your system:

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
Yes [ ] No [ ]

Indicate how you notified system users that your annual report is available, and is free of charge.
[X] Public access/notice via the web
[X] Public access/notice via Government Office
[X] Public access/notice via a newspaper

[ ] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method _____

Describe your Drinking-Water System

One Well supplies water to community centre, no treatment

List all water treatment chemicals used over this reporting period

None

Were any significant expenses incurred to?

[ ] **Install required equipment**
[ ] **Repair required equipment**
[ ] **Replace required equipment**

10 Describe

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre?

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
July 20/05	Total Coliform	1		Resample and retest	July 21/05
August 31/05	Total Coliform	1		Resample and retest	Sept 1/05

Microbiological testing done under section 8 (2) during this reporting period

	Number of Samples	Range of E.Coli or Fecal Results (#-#)	Range of Total Coliform Results (#-#)	Number of HPC Samples	Range of HPC Results (#-#)
Raw	**54**	**<1**	**<1-1**	**52**	**<10-100**

Treated					
Distribution					

Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (#-#)
Turbidity		
Chlorine		
Fluoride **(If the DWS provides fluoridation)**		

NOTE: For continuous monitors use 8760 as the number of samples.

NOTE: ***Record the unit of measure if it is*** *not* ***milligrams per litre.***

Summary of additional testing and sampling carried out in accordance with the requirement of an approval or order.

Date of order or C of A	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or most recent

11 Parameter	12 Sample Date	Result Value	13 Unit of Measure	14 Exceedance
5.1 Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
5.1 Chromium				
5.1 Lead				
Mercury				
Selenium				
Uranium				
Fluoride				
Nitrite	December 13/05	<0.1	mg/L	No
Nitrate	December 13/05	<0.1	mg/L	No

Summary of Organic parameters sampled during this reporting period or most recent

Parameter	15 Sample Date	Result Value	16 Unit of Measure	17 Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Heptachlor + Heptachlor Epoxide				

Linadane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (**NOTE**: **show latest quarterly average**)				
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	**Result Value**	**Unit of Measure**	**Date of Sample**

(Only if category is large municipal residential, small municipal residential, large municipal non residential, small municipal non residential, large non municipal non residential)

Appendix 4

Drinking-System Regulations O.Reg. 170/03

Part III Form 2
Section 11. ANNUAL REPORT.

Drinking-Water System Number:	260033800
Drinking-Water System Name:	**Hilton Hall**
Drinking-Water System Owner:	**Municipality of Brighton**
Drinking-Water System Category:	**Small Municipal none Residential**
Period being reported:	**Janaury1/05- December 31/05**

Complete if your Category is Large Municipal Residential or Small Municipal Residential	*Complete for all other Categories.*
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [ ] Is your annual report available to the public at no charge on a web site on the Internet? Yes [ ] No [ ] Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Number of Designated Facilities served: 0 Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ] Number of Interested Authorities you report to: 0 Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
Yes [ ] No [ ]

Indicate how you notified system users that your annual report is available, and is free of charge.

[x] Public access/notice via the web
[x] Public access/notice via Government Office
[x] Public access/notice via a newspaper
[ ] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method _____

Describe your Drinking-Water System

One well supplies water to Hall, inline filter and UV for disinfection.

List all water treatment chemicals used over this reporting period

None

Were any significant expenses incurred to?

[ ] **Install required equipment**
[ ] **Repair required equipment**
[ ] **Replace required equipment**

18 Please provide a brief description and a breakdown of monetary expenses incurred

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
March 9/05	Background	585		Chlorinated, flushed and resample	March 10/05
December 14/05	Total Coliform	48		Chlorinated, flushed and resampled	Dec15/05

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	**52**	**<1**	**<1cts/100ml**		
Treated	**54**	**<1**	**<1-48 cts/100ml**	**52cts/1ml**	**<10-585cts/1ml**
Distribution					

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity		
Chlorine		
Fluoride **(If the DWS provides fluoridation)**		

NOTE: For continuous monitors use 8760 as the number of samples.

NOTE: ***Record the unit of measure if it is*** *not* ***milligrams per litre.***

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

19 Parameter	**20 Sample Date**	**Result Value**	**21 Unit of Measure**	**22 Exceedance**
5.1 Antimony				
Arsenic				
Barium				
Boron				

Cadmium				
5.1 Chromium				
5.1 Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite	Dec13/05	<0.1	mg/l	no
Nitrate	Dec 13/05	0.8	mg/l	no

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	**23 Sample Date**	**Result Value**	**24 Unit of Measure**	**25 Exceedance**
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				

2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (**NOTE**: **show latest annual average**)				
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample

(Only if DWS category is large municipal residential, small municipal residential, large municipal non residential, non municipal year round residential, large non municipal non residential)