



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	260 001 458
Drinking-Water System Name:	Kitchener Distribution System
Drinking-Water System Owner:	City of Kitchener
Drinking-Water System Category:	Distribution
Period being reported:	January 1, 2009 to December 31, 2009

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [<input checked="" type="checkbox"/>] No []</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [<input checked="" type="checkbox"/>] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Utilities Operations Centre – 83 Elmsdale Drive, Kitchener </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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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
Breslau (Elroy Acres) Distribution System	260022152

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.

- Public access/notice via the web
- Public access/notice via Government Office
- 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

The City of Kitchener owns, operates and maintains the distribution system and all associated appurtenances (valves, hydrants, etc.) that supply water to the residents of Kitchener. The distribution system receives its supply from the Region of Waterloo pumping and treatment centres including Mannheim Water Treatment Plant, Mannheim Reservoir, Greenbrook, Strange Street Pumping Station and Parkway Pumping Station

List all water treatment chemicals used over this reporting period

N/A – See Region of Waterloo

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment

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

N/A – See Region of Waterloo

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

Please refer to attached spreadsheet “Table 1 - Adverse Water Quality Incident Summary - January 1 to December 31, 2009”

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					
Treated					
Distribution	1732*	All absent 0CFU/100mL	1730 absent, 2 present	543	0-511 CFU/100mL

*number of samples completed by the laboratory, additional samples are also completed on newly commissioned watermains.

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	2095 Total*	0.02-2mg/L
	2095 Free	0.0-1.19mg/L
Fluoride (If the DWS provides fluoridation)		

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

*includes samples taken by the laboratory and weekly chlorine residuals: additional chlorine residual are completed on newly commissioned watermains, water quality investigations, and as part of dead end main flushing programs – these are not included.

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



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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	226	<1.0 - 37.5	7 samples at 6 locations (1 was a resample)
Distribution	42	<1.0 – 1.1	0

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
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)		21.15	µg/L	no
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

Table 1 - Adverse Water Quality Incident Summary - January 1 to December 31, 2009

Code	AWQI No*	Site Name	Site Address	Sample Date	Sample Time	Adverse Type	Notes
DEM24	87280	Hydrant # 2533	43 Crestview Pl	3/25/2009	11:30	Low Chlorine	
DEM 77	87651	Hydrant #1921	Blockline Rd	4/17/2009	12:41	Low Chlorine	
DEM 79	87746	Hydrant #659	Maplewood Pl	4/23/2009	10:20	Low Chlorine	
DEM23	87747	Hydrant # 2531	27 Riverview Pl	4/23/2009	12:25	Low Chlorine	
DEM74	87767	Hydrant #2943	262 McBrine Dr	4/24/2009	10:58	Low Chlorine	
DEM 80	87815	Hydrant # 4287	Pebblecreek	4/28/2009	13:05	Low Chlorine	
KID91	87974	Breithaupt Center	350 Margaret Ave	5/8/2009	10:57	Low Chlorine	
KID84	88005	Well K36 Distribution	106 Kilkerran Cres.	5/11/2009	10:36	Low Chlorine	
KID91	88413	Breithaupt Center	350 Margaret Ave	6/5/2009	10:37	Low Chlorine	
KID91	88447	Breithaupt Center	350 Margaret Ave	6/8/2009	12:53	Low Chlorine	
KID91	88965	Breithaupt Center	350 Margaret Ave	7/3/2009	10:20	Low Chlorine	
temp8	89537	port at 306 Dixon	306 Dixon	7/15/2009	13:50	Total Coliform Present	
KID65	89596	Nelson Stone Centre	620 Bridge St E	7/17/2009	10:49	Low Chlorine	
KID91	90072	Breithaupt Center	350 Margaret Ave	7/30/2009	13:19	Low Chlorine	
DEM 81	90096	Hydrant #601	758 Union St	7/30/2009	15:25	Low Chlorine	hydrant associated with KID 91
KID65	90465	Nelson Stone Centre	620 Bridge St E	8/13/2009	10:50	Low Chlorine	
DEM20	90475	Hydrant # 2134	620 Bridge St E	8/13/2009	12:00	Low Chlorine	
KID91	90825	Breithaupt Center	350 Margaret Ave	8/27/2009	10:57	Low Chlorine	
KID65	91186	Nelson Stone Centre	620 Bridge St E	9/11/2009	10:38	Low Chlorine	
KID91	91420	Breithaupt Center	350 Margaret Ave	9/24/2009	10:14	Low Chlorine	
DEM 81	91420	Hydrant #601	758 Union ST	9/24/2009	13:05	Low Chlorine	hydrant associated with KID 91



temp9	91443	Madison Temporary	at BFP near Schneider Creek	9/23/2009	15:00	Total Coliform Present	
KID65	91750	Nelson Stone Centre	620 Bridge St E	10/8/2009	12:33	Low Chlorine	
KID67	91865	Eldorado Plywood Specialities	10 Hollinger Crescent	10/16/2009	10:27	Low Chlorine	
KID91	92000	Breithaupt Center	350 Margaret Ave	10/22/2009	13:25	Low Chlorine	
KID91	92395	Breithaupt Center	350 Margaret Ave	11/19/2009	13:55	Low Chlorine	
KID67	92487	Eldorado Plywood Specialities	10 Hollinger Crescent	11/26/2009	10:47	Low Chlorine	
KID65	92624	Nelson Stone Centre	620 Bridge St E	12/3/2009	11:57	Low Chlorine	
KID65	92658	Nelson Stone Centre	620 Bridge St E	12/7/2009	10:00	Low Chlorine	
KID65	92902	Nelson Stone Centre	620 Bridge St E	12/30/2009	11:03	Low Chlorine	

* more than one location can be associated with an AWQI number

Legend

DEM Adverse results from Dead End Main Flushing program
 KID regular Kitchener Distribution Sampling Locations
 temp temporary watermain