

## Part III Form 2

## Section 11. ANNUAL REPORT.

Drinking-Water System Number:  
Drinking-Water System Name:  
Drinking-Water System Owner:  
Drinking-Water System Category:  
Period being reported:

210000639
Rockland Water treatment Plant
The Corporation of the City of Clarence-Rockland
Large Municipal Residential
January 1 <sup>st</sup> to December 31, 2004

**Complete if your Category is Large Municipal Residential or Small Municipal Residential**

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.

Municipal Office  
The City of Clarence-Rockland  
1560 Laurier Street  
Rockland  
K4K 1P7

**Complete for all other Categories.**

Number of Designated Facilities served:

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?

Yes ☐ No ☐

Number of Interested Authorities you report to:

N/A

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:

N/A

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

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- ☐ Public access/notice via Public Request  
☐ Public access/notice via a Public Library  
☐ Public access/notice via other method \_\_\_\_\_

## Describe your Drinking-Water System

Serving the residents of The City of Clarence-Rockland this surface water treatment plant is capable of supplying water at a rate of 13,500 m<sup>3</sup>/day and consists of the following components; Raw water intake, low lift pumping station including two (2) vertical turbine pumps, two (2) treatment Actiflow trains followed by two (2) rapid dual media gravity filters, one (1) UV disinfection system consisting of two (2) units, one (1) 233.5 m<sup>3</sup> chlorine contact tank, two (2) reservoirs having a total capacity of approximately 395 m<sup>3</sup>, one (1) booster pumping station complete with three (3) centrifugal and a chloramination chemical feed system, two (2) standby diesel power generator located at booster station & water treatment plant respectively and a chemical feed system consisting of chemical pumps, storage tanks, piping and associated appurtenances to dose alum, polyelectrolyte, sodium hydroxide, Ammonium Sulphate and sodium hypochlorite. This facility operates under Certificate of Approval # 5045-5P5JYS and Permit to Take Water # 88-P-4044.

## List all water treatment chemicals used over this reporting period

Alum, Polyelectrolyte, Carbon Dioxide, Sodium hydroxide, Ammonium Sulphate and Sodium Hypochlorite.

## Were any significant expenses incurred to?

- ☒ Install required equipment  
☒ Repair required equipment  
☐ Replace required equipment

## Describe

- Installation of a new Chlorine Analyzer to monitor the Secondary Disinfection Residual from the Bouvier road water tower
- Installed a new micro sand monitoring system on both Actiflow Units
- Repair/replace the Sodium Hydroxide bulk storage tank liner
- Painting of the new water tower on Bouvier road

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
12 Jan 2004	Low Pressure in Distribution System	N/A	N/A	Restore Pressure	12 Jan 2004
13 Jan 2004	Total Coliform	1	Cts/100ml	Resample	13 Jan 2004
15 Jul 2004	Background	>200	Cts/100ml	Resample	16 Jul 2004
6 Aug 2004	Total Coliform	15	Cts/100ml	Resample	6 Aug 2004

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## 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 Or Background Colony Counts	Range of HPC Results (#-#) Or Background Colony Counts
Raw	52	0 - 330	0 - 3500	52	0 - 20000
Treated	51	0	0	51	0
Distribution	425	0	0 - 15	425	0 - >200

## 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	0.04 - 0.85 NTU
Chlorine	8760	0.54 - 2.2 mg/l
Chlorine Residual Distribution System	8760	0.1 - 2.9 mg/l
Fluoride (If the DWS provides fluoridation)	N/A	N/A

**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
9 Jul 2004 (C of A)	Suspended Solids	30 Mar 2004	3	mg/l
9 Jul 2004 (C of A)	Suspended Solids	7 Apr 2004	4	mg/l
9 Jul 2004 (C of A)	Suspended Solids	4 May 2004	3	mg/l
9 Jul 2004 (C of A)	Suspended Solids	3 Jun 2004	<3	mg/l
9 Jul 2004 (C of A)	Suspended Solids	19 Jul 2004	<3	mg/l
9 Jul 2004 (C of A)	Suspended Solids	16 Aug 2004	<3	mg/l
9 Jul 2004 (C of A)	Suspended Solids	9 Sep 2004	8	mg/l
9 Jul 2004 (C of A)	Suspended Solids	12 Oct 2004	4	mg/l
9 Jul 2004 (C of A)	Suspended Solids	16 Nov 2004	3	mg/l
9 Jul 2004 (C of A)	Suspended Solids	6 Dec 2004	11	mg/l

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	28 Apr 2004	<0.001	mg/l	No
Arsenic	28 Apr 2004	<0.001	mg/l	No
Barium	28 Apr 2004	0.017	mg/l	No

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Boron	28 Apr 2004	0.008	mg/l	No
Cadmium	28 Apr 2004	<0.0001	mg/l	No
Chromium	28 Apr 2004	<0.001	mg/l	No
Lead	28 Apr 2004	0.0002	mg/l	No
Mercury	28 Apr 2004	<0.0001	mg/l	No
Selenium	28 Apr 2004	0.001	mg/l	No
Sodium	28 Apr 2004	19.7	mg/l	No
Uranium	28 Apr 2004	<0.0001	mg/l	No
Fluoride	28 Apr 2004	<0.1	mg/l	No
Nitrite	10 Feb 2004	<0.1	mg/l	No
Nitrate	10 Feb 2004	0.3	mg/l	No
Nitrite	28 Apr 2004	<0.1	mg/l	No
Nitrate	28 Apr 2004	0.3	mg/l	No
Nitrite	11 Aug 2004	<0.1	mg/l	No
Nitrate	11 Aug 2004	0.3	mg/l	No
Nitrite	12 Oct 2004	<0.1	mg/l	No
Nitrate	12 Oct 2004	0.2	mg/l	No

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	28 Apr 2004	<0.0003	mg/l	No
Aldicarb	28 Apr 2004	<0.003	mg/l	No
Aldrin + Dieldrin	28 Apr 2004	<0.00003	mg/l	No
Atrazine + N-dealkylated metabolites	28 Apr 2004	<0.001	mg/l	No
Azinphos-methyl	28 Apr 2004	<0.001	mg/l	No
Bendiocarb	28 Apr 2004	<0.003	mg/l	No
Benzene	28 Apr 2004	<0.0005	mg/l	No
Benzo(a)pyrene	28 Apr 2004	<0.000005	mg/l	No
Bromoxynil	28 Apr 2004	<0.000094	mg/l	No
Carbaryl	28 Apr 2004	<0.003	mg/l	No
Carbofuran	28 Apr 2004	<0.001	mg/l	No
Carbon Tetrachloride	28 Apr 2004	<0.0002	mg/l	No
Chlordane (Total)	28 Apr 2004	<0.00005	mg/l	No
Chlorpyrifos	28 Apr 2004	<0.0005	mg/l	No
Cyanazine	28 Apr 2004	<0.0005	mg/l	No
Diazinon	28 Apr 2004	<0.001	mg/l	No
Dicamba	28 Apr 2004	<0.005	mg/l	No
1,2-Dichlorobenzene	28 Apr 2004	<0.0001	mg/l	No
1,4-Dichlorobenzene	28 Apr 2004	<0.0002	mg/l	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	28 Apr 2004	<0.0001	mg/l	No
1,2-Dichloroethane	28 Apr 2004	<0.0001	mg/l	No
1,1-Dichloroethylene (vinylidene chloride)	28 Apr 2004	<0.0001	mg/l	No

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Dichloromethane	28 Apr 2004	<0.0003	mg/l	No
2-4 Dichlorophenol	28 Apr 2004	<0.0001	mg/l	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	28 Apr 2004	<0.005	mg/l	No
Diclofop-methyl	28 Apr 2004	<0.0004	mg/l	No
Dimethoate	28 Apr 2004	<0.001	mg/l	No
Dinoseb	28 Apr 2004	<0.001	mg/l	No
Diquat	28 Apr 2004	<0.005	mg/l	No
Diuron	28 Apr 2004	<0.005	mg/l	No
Glyphosate	28 Apr 2004	<0.025	mg/l	No
Heptachlor + Heptachlor Epoxide	28 Apr 2004	<0.0001	mg/l	No
Linadane (Total)	28 Apr 2004	<0.0001	mg/l	No
Malathion	28 Apr 2004	<0.005	mg/l	No
Methoxychlor	28 Apr 2004	<0.0001	mg/l	No
Metolachlor	28 Apr 2004	<0.003	mg/l	No
Metribuzin	28 Apr 2004	<0.003	mg/l	No
Monochlorobenzene	28 Apr 2004	<0.0002	mg/l	No
Paraquat	28 Apr 2004	<0.001	mg/l	No
Parathion	28 Apr 2004	<0.003	mg/l	No
Pentachlorophenol	28 Apr 2004	<0.0001	mg/l	No
Phorate	28 Apr 2004	<0.0003	mg/l	No
Picloram	28 Apr 2004	<0.005	mg/l	No
Polychlorinated Biphenyls(PCB)	28 Apr 2004	<0.00006	mg/l	No
Prometryne	28 Apr 2004	<0.0001	mg/l	No
Simazine	28 Apr 2004	<0.0005	mg/l	No
THM (NOTE: show latest annual average)	12 Oct 2004	0.078	mg/l	No
Temephos	28 Apr 2004	<0.013	mg/l	No
Terbufos	28 Apr 2004	<0.0003	mg/l	No
Tetrachloroethylene	28 Apr 2004	<0.0002	mg/l	No
2,3,4,6-Tetrachlorophenol	28 Apr 2004	<0.00014	mg/l	No
Triallate	28 Apr 2004	<0.01	mg/l	No
Trichloroethylene	28 Apr 2004	<0.0001	mg/l	No
2,4,6-Trichlorophenol	28 Apr 2004	<0.0001	mg/l	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	28 Apr 2004	<0.011	mg/l	No
Trifluralin	28 Apr 2004	<0.0005	mg/l	No
Vinyl Chloride	28 Apr 2004	<0.0002	mg/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 DWS category is large municipal residential, small municipal residential, large municipal non-residential, non municipal year round residential, large non municipal non residential)