#### ANNUAL DRINKING WATER REPORT 2012-2013

# ST. JOSEPH'S CATHOLIC SCHOOL, CALABOGIE

#### **Introduction**

The Renfrew County Catholic District School Board is pleased to present to the parents and students of St. Joseph's, Calabogie its annual drinking water report. The province's Drinking Water Protection Regulation for Smaller Water Works Serving Designated Facilities requires that we publish this report for your information. Here you will find the water quality and other information that we were required to collect for the annual period April 1, 2012 to March 31, 2013.

If you have a question about the St. Joseph's, Calabogie water supply or this report, please call the Community Use of Schools/Plant Services Officer @ 613-732-8534, or school principal Jody Weller @ 613-752-2808 during business hours.

#### **Water System Information**

St. Joseph's has been served by an on-site well supply inside the building since the school was built in 1931. The well was drilled when the expansion was built in 1969 to a depth of approximately 16 meters, where water is obtained from clay over gravel aquifer. In order to comply with the minimum treatment requirements contained in the regulation, ultraviolet disinfection equipment was installed in the spring of 2002. A professional engineer hired by the Board provided certification that the water works at the school meets the minimum requirements set forth in the regulation. This engineering assessment and certification is a mandatory requirement of the regulation.

#### **Equipment Costs Incurred in 2012-2013**

The cost of treatment equipment, weekly testing and the consultant was approximately \$5817.77

#### **Summary of notices and reports**

As required by the regulation, the Renfrew County Catholic District School Board submitted a notice to the Ministry of the Environment and to the interested authority (the Ministry of Education) advising it that the water supply at the school did not meet the minimum treatment requirements. The notice of non-compliance also advised that the Board had retained the services of an engineering consultant and planned to be in compliance by March 2002.

In March 2002, after the new water works commenced operation, the Board submitted its engineer's report to the Ministry of the Environment and the interested authority (the Ministry of Education) as required by the regulation. In October 2012 a new engineers report was required. This report was submitted to the Ministry of the Environment and the interested authority (The Ministry of Education) as required by the regulation. Both reports certified that St. Joseph's School, Calabogie water works met all requirements.

On October 3, 2012 a Ministry of the Environment Drinking Water Inspection was completed. ACTION Required items were to have immediate update of the registration profile and to provide a new EER report. All information in this report can be viewed online or at the request of an individual at St. Joseph's Catholic School.

#### Adverse water quality notifications and corrective actions

On May 22, 2012, there was one detection of Nitrate (N) at 3.8 mg/L however, the combined Nitrate & Nitrite was 3.8 mg/L so no notification was required as it must exceed 10 mg/L combined.

There was one notice submitted on May 25, 2012 to the Ministry of the Environment and the local Medical Officer of Health indicating samples with adverse water quality for sodium. In this case, it is a direct result of the water softener. Samples were re-taken and the result was the same. A notice of high sodium content in the water was developed and approved by the Renfrew County Health Unit and posted beside fountains, in the kitchen area and on bulletin boards. This notice has also been placed on the RCCDSB Health & Safety Website. A notice is to go out to parents at the beginning of each school year to notify them of the high sodium content in the water. A notice of issue resolution was sent out to the Ministry of the Environment and the local Medical Officer of Health on May 25, 2012.

On August 29, 2012, there was one detection of Nitrate (N) at 3.0 mg/L however, the combined Nitrate & Nitrite was 3.0 mg/L so no notification was required as it must exceed 10 mg/L combined.

There was one notice submitted on Sept 19, 2012 to the Ministry of the Environment and the local Medical Officer of Health indicating samples with adverse water quality for coliform. In this case, the school was notified to seek or boil alternate water, water signs were posted, fountains covered, lines were flushed and the faucet cleaned prior to re-sampling. Samples were re-taken on September 19, 2012. A notice of issue resolution was sent out to the Ministry of the Environment and the local Medical Officer of Health on September 24, 2012.

On November 13, 2012, there was one detection of Nitrate (N) at 9.3 mg/L however, the combined Nitrate & Nitrite was 9.3 mg/L so no notification was required as it must exceed 10 mg/L combined.

On February 13, 2013, there was one detection of Nitrate (N) at 9.4 mg/L however, the combined Nitrate & Nitrite was 9.4 mg/L so no notification was required as it must exceed 10 mg/L combined.

# **Summary of water quality**

The regulation requires the Board to sample for various types of water quality parameters at prescribed frequencies. The results are presented below, followed by some definitions you may find useful.

### Summary of Results for Microbiological Parameters April 1, 2012- March 31, 2013

Parameter	Sample Type	Frequency	# of samples Yearly	Amount Detected	# of exceedances
Total Coliforms (per 100 mL)	Raw Water	Monthly	12	ND	0
Total Coliforms (per 100 mL)	Treated Water	Monthly	12	7	1
Total Coliforms (per 100 mL)	Distribution Line	Monthly	12	ND	0
E.coli (per 100 mL)	Raw Water	Monthly	12	ND	0
E.coli (per 100 mL)	Treated Water	Monthly	12	ND	0
E.coli (per 100 mL)	Distribution Line	Monthly	12	ND	0
Nitrites/Nitrates (N)	Treated	Quarterly	4	3.8 mg/L 3 mg/L 9.3 mg/L 9.4 mg/L	0

<sup>\*</sup>ND - non detectable

# Summary of Results for Chemical Parameters (Collected May 22, 2012)

Parameter	M.D.L	Pump Room Treated	Kitchen/Staff Room
Antimony	0.0001	0.0001	
Arsenic	0.0001	0.0001	
Barium	0.001	0.002	
Boron	0.005	0.027	
Cadmium	0.00002	< 0.00002	
Chromium	0.002	< 0.002	
Lead	0.00002		0.00382
Mercury	0.00002	< 0.00002	
Selenium	0.001	< 0.001	
Sodium	0.2	199	
Uranium	0.00005	0.00061	
Benzene	0.5	<0.5	
Carbon Tetrachloride	0.2	<0.2	
Dichlorobenzene 1, 2-	0.1	<0.1	
Dichlorobenzene 1, 4-	0.2	<0.2	
Dichloroethane 1, 2-	0.1	<0.1	
Dichloroethene 1, 1-	0.1	<0.1	
Dichhoromethane (Methylene Chloride)	0.3	<0.3	
Monochlorobenzene (Chlorobenzene)	0.2	<0.2	
Tetrachloroethylene	0.2	<0.2	
Trichloroethylene	0.1	<01	
Vinyl Chloride	0.2	<0.2	
Background	1	0	0
Fluoride	0.1	0.2	
Alachlor	0.3	<0.3	
Aldicarb	3	<3	
Aldrin + Deildrin	0.02	< 0.02	
Atrazine + Metabolites	0.5	<0.5	
Azinphos-methyl	1	<1	
Bendiocarb	3	<3	
Benzo(A)pyrene	0.005	< 0.005	
Bromozynil	0.3	<0.3	
Carbaryl	3	<3	
Carbofuran	1	<1	
Chlordane (Total)	0.04	< 0.04	
Chlorpyrifos	0.5	<0.5	
Cyanazine	0.5	<0.5	
DDT + Metabolites	0.01	<0.01	
Diazinon	1	<1	
Dicamba	5	<b>&lt;</b> 5	
Dichlorophenol 2, 4-	0.1	<0.1	
Dichlorophyenoxy acetic acid 2, 4- (2,4-D)	5	<b>&lt;</b> 5	
Diclofop-methyl	0.5	<0.5	
Dimethoate	1	<1	
Dinoseb	0.5	<0.5	
Diquat	5	<b>&lt;</b> 5	
Diuron	5	<b>&lt;</b> 5	
Glyphosate	25	<25	

Parameter	M.D.L.	Pump Room	Kitchen/Staff
		Treated	Room
Heptachlor + Heptachlor Epoxide	0.1	<0.1	
Lindane (Hexachlorocyclohexane, Gamma)	0.1	<0.1	
Malathion	5	<5	
Methozychlor	0.1	<0.1	
Metolachlor	3	<3	
Metribuzin	3	<3	
Paraquat	1	<1	
Paranthion	3	<3	
Pentachlorophenol	0.1	<0.1	
Phorate	0.3	<0.3	
Picloram	5	<5	
Poly-Chlorinated Biphenyls (PCB's)	0.05	< 0.05	
Prometryne	0.1	<0.1	
Simazine	0.5	<0.5	
Temephos	10	<10	
Terbufos	0.3	<0.3	
Tetrachlorophenol, 2, 3, 4, 6-	0.1	<0.1	
Triallate	10	<10	
Trichlorophenol 2, 4, 6-	0.1	<0.1	
Trichlorophenoxy acetic acid 2,4, 5-	10	<10	
Trifluralin	0.5	<0.5	

Note: Sampling frequency is once per five years.

**MDL – Minimum Detectable Limit (micrograms)**