

REGION OF OTTAWA-CARLETON  
RÉGION D'OTTAWA-CARLETON

REPORT  
RAPPORT

Our File/N/Réf.  
 Your File/V/Réf.

DATE 19 September 2000

TO/DEST. Co-ordinator  
 Corporate Services and Economic Development Committee

FROM/EXP. Deputy Commissioner  
 Environment and Transportation Department

SUBJECT/OBJET **NEW PROVINCIAL DRINKING WATER REGULATIONS –  
 FINANCIAL IMPLICATIONS**

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**DEPARTMENTAL RECOMMENDATIONS**

**That the Corporate Services and Economic Development Committee and Council approve:**

- 1. The establishment of new authority in the Water Division 2000 Operating Budget in the amount of \$45,500 to be transferred from the Water Reserve Fund to accommodate the operating costs associated with the implementation of the new Provincial Drinking Water Regulations;**
- 2. The establishment of new capital authority in the amount of \$630,000 to be transferred from the Water Capital Reserve Fund for the Drinking Water Protection Regulatory Changes, Project #900602, to accommodate expected one-time costs associated with the implementation of the new Provincial Drinking Water Regulations;**
- 3. That, due to time constraints, the Environment and Transportation Deputy Commissioner be delegated the authority to approve consulting engineering contracts associated with the implementation of the new Provincial Drinking Water Regulations, subject to the availability of funds as identified in this report.**

**RATIONALE**

Following the Walkerton E-coli drinking water outbreak, the Ontario Ministry of the Environment (MOE) announced the new initiative called “Operation Clean Water” on 08 August 2000. There were a number of announcements with respect to Operation Clean Water, with the most immediate and

significant impact being the Ontario "Drinking Water Protection" Regulation 459/00, which came into effect immediately upon being published in the Ontario Gazette on 26 August 2000. As well, proposed changes to the Ontario "Waterworks and Sewage Works" Regulation Number 435/93, were also announced. An information report based on staff's understanding of the impacts of these new regulations was provided to the Planning and Environment Committee on 12 September 2000 and to Council on 27 September 2000. The major issues in the regulations resulting in financial impacts are identified in the following sections along with the resulting impacts on the Region, and as of 01 January 2001, the new City of Ottawa.

The new regulations require owners of Water Treatment facilities to have their facilities inspected by a professional engineer registered in the Province of Ontario. These engineering reports must be submitted to the Ministry of Environment according to a prescribed timeframe with the first report due 30 November 2000. Further reports are due to the Ministry in early 2001 and will require significant time for preparation. Therefore, contracts must be awarded in advance to allow adequate time for the work to be performed. Due to the restricted time available to prepare these reports it is recommended that the Environment and Transportation Deputy Commissioner be delegated the authority to approve consulting engineering contracts associated with the implementation of the new Provincial Drinking Water Regulations. Contracts will be awarded in accordance with corporate procurement policies. Delays in the awarding of engineering contracts could result in non-compliance with the regulations.

## ACCREDITED LABORATORIES

### Regulation Requirements

All laboratories that perform drinking water analysis must now be accredited for the tests they perform, by the Standards Council of Canada or its equivalent. The Standards Council has partnered with the Canadian Association for Environmental Analytical Laboratories (Inc.) (CAEAL) to provide this accreditation service.

### Financial Impacts

The financial impact due to the Region's accreditation requirements is estimated at \$45,000 annually for the Britannia laboratory. This includes the accreditation yearly fees, as well as specific laboratory protocols, which must be followed to meet the accreditation requirements. The R.O. Pickard Centre laboratory accreditation fees do not have a new financial impact since that laboratory has been accredited for various analysis since 1997, and the fees are already incorporated into the annual operating budget. The additional requirement for the 2000 Operating Budget for the remainder of 2000 is estimated at \$25,000.

## FREQUENCY OF SAMPLING

### Regulation Requirements

The new regulations provide a detailed sampling schedule for owners based upon the source water and level of water treatment provided. The Region currently operates two surface water treatment facilities with filtration (Britannia and Lemieux Island Water Purification Plants), and five separate ground water supply systems (Kings Park in Richmond, Carp, Vars, Munster Hamlet and Carleton Lodge). Although there is no impact on the two water purification plants or on the central water distribution system, the MOE has increased sampling frequency for our communal water systems. It will be necessary to ensure that our sampling programs meet the different requirements for each of these systems.

### Financial Impacts

The frequency of sampling requirements has no financial impact associated with the Region's central water distribution system, which includes the two water treatment plants.

The one time financial impact of adding continuous online turbidity meters at all of the Communal Well Systems is estimated to be \$30,000. The ongoing yearly operational financial impact due to the sampling frequency and analysis requirements and the ongoing operation and maintenance of the new turbidity meters is estimated to be \$25,000. The additional requirement for the 2000 Operating Budget for the remainder of 2000 is estimated at \$8,000.

## PUBLIC ACCESS TO INFORMATION

### Regulation Requirements

The new regulations require specific information to be released to the general public. The owner of a water system must now prepare and submit quarterly reports to the MOE and make these reports available to the public. Each report must describe the operation of the water system and the measures taken to comply with the regulations, including a summary of all analytical results of the drinking water sampled.

The regulations also require the owner of a water treatment or distribution system to make available the following information without charge to any member of the public:

- A copy of every report given to the owner by an accredited laboratory on the analysis of a drinking water sample;
- A copy of every report or record made of the analysis of water samples at the water plants or in the water distribution system, which are considered operational parameters. Operational parameters are specifically defined in the New Regulations. Analysis of

operational parameters can be performed by on line instruments, by licensed operators or by licensed laboratory technicians;

- A copy of every approval and every directive under the Act that applies to the water system and is still in effect;
- A copy of every quarterly report;
- A copy of any “adverse water quality” reports, as defined in the regulation;
- A copy of Regulation 459/00 and of the Ontario Drinking Water Standards.

The owner must make this information available within one day of having the information in their possession, and must keep this information available for a minimum of two years. For owners with a system(s) which serve a population of greater than 10,000 persons, the quarterly reports must be available on the World Wide Web.

The regulations also require the owner of any accredited laboratory, which prepares reports of drinking water samples and analysis for owners of water systems, to send a copy of these reports to the MOE at the same time as they are sent to the owner. This means that the MOE will receive from the Region, or the laboratories preparing reports for the Region, a copy of every water quality analysis performed on our drinking water (approximately 168,000).

### Financial Impacts

The financial impacts include staff time for co-ordination all of the information, inputting the data on the Web, preparing the quarterly reports, making copies available to the public, providing appropriate office space for the public to view the information, advertising to inform the public of the quarterly reports, etc. We have estimated an initial cost of \$100,000, with an ongoing yearly operating cost of \$50,000. The additional requirement for the 2000 Operating Budget for the remainder of 2000 is estimated at \$12,500.

The financial impact on the Region due to the requirement to submit accredited laboratory reports to the Ministry of the Environment cannot yet be estimated as details have not been worked out. However, it has been made clear that this cost will be passed on to the owners of the water facilities, and not the MOE.

### STAFF TRAINING

#### Regulation Requirements

The new Ontario Drinking Water Protection Regulation (No. 459/00) and the proposed changes to the Ontario Waterworks and Sewage Works Regulation (No. 435/93) have impacts on staff training for

both water and wastewater staff. Although the new regulations were primarily focussed on Drinking Water facilities, the proposed changes to Ontario Regulation 435/93 impacts both the Water and Wastewater facilities in all municipalities across Ontario.

The previous requirements under Regulation 435/93 stated that owners of water and wastewater facilities (four different categories: water treatment, water distribution, wastewater treatment, wastewater collection) had to provide a minimum of 40 hours of training per year for every licensed operator. The regulations have now increased this requirement by 12 hours per year, to 52 hours per licensed operator, per year.

The regulations have also added a new category of license, called "Water Quality Analyst" for those staff that are involved in sampling and analyzing drinking water, and who are not licensed operators, or members of an accredited laboratory.

### Financial Impact

The Water and Water Environment Protection Divisions currently have approximately 260 licensed operators. The additional 12 hours of training per year impacts both workload and the training budget.

The estimated financial impact due to the additional staffing needs to support the operations and maintenance activities affected, and the staff training requirements, is \$300,000. The financial impact on the New City of Ottawa as of 01 January 2001 will be even greater as all licensed wastewater collection operators from the local municipalities within the Region will have to be added to this estimate. There is no additional requirement for the 2000 Operating Budget.

## FACILITIES INSPECTION

### Regulation Requirements

The new regulations require owners of Water Treatment facilities to have their facilities inspected by a professional engineer registered in the Province of Ontario. The first reports are required within a specific time frame. For the Region, this includes the following facilities, with the dates of when the reports must be submitted to the MOE:

- a. Vars Water Treatment Plant and Communal System (30 November 2000)
- b. Munster Hamlet Communal Water System (31 January 2001)
- c. Lemieux Island Water Purification Plant (31 March 2001)
- d. Britannia Water Purification Plant (31 March 2001)
- e. Carleton Lodge Water System (31 March 2001)
- f. Carp Communal Water System (31 May 2001)

These reports must be prepared based on the Terms of Reference provided by the Province, and completed to the satisfaction of the MOE. The Regulations make the owner responsible for all costs,

including the hiring of the Engineer and the completion of the reports. The MOE will then use this engineer's report to possibly make changes to the Certificate of Approval for each one of our facilities. As well, based on the findings of the engineer's report, the MOE will instruct the owner on the timing of the next engineer's report. An engineer's report will be required every three years for each facility, unless earlier reports are required by the MOE.

As well, the MOE has informed us that they will now be performing yearly inspections and will provide us with an inspection report for each of our facilities.

The MOE has recently completed their inspections of the Britannia and Lemieux Island Water Purification Plants. The Region has received one order for each of these facilities, which requires the Region to make application for a "Permit to Take Water" for drawing water from the Ottawa River. The MOE inspection reports showed compliance with all other aspects.

#### Financial Impacts

The estimated cost to have the first engineering reports prepared for all of our facilities is \$500,000. It is not possible to determine the annual operating cost implication of the ongoing requirement to prepare and submit subsequent engineering reports to the Ministry as the timing will only be determined following the submission of the first reports. However, we estimate that over the course of three (3) years, assuming that all facilities will be inspected over that period and that each facility will require only one inspection over that period, the total cost of one inspection of all facilities will be approximately \$450,000. For budgeting purposes, we recommend therefore, that an annual requirement of \$150,000 be included in the budget. There is no immediate requirement for the 2000 Operating Budget.

The yearly facility inspections carried out by Ministry staff are not expected to have significant financial impact.

#### CONSULTATION

The public consultation process is not applicable.

#### EXPENDITURE JUSTIFICATION

The requirement for the expenditures is immediate and necessary to ensure the Region of Ottawa-Carleton, and as of 01 January 2001 the City of Ottawa, is in compliance with the new Provincial Drinking Water Regulations. The total ongoing annual Operating Budget requirement is estimated at \$420,000 and will be identified in the 2001 Budget process. The Operating Budget requirement for the remainder of 2000 is \$45,500. The total required Capital authority in 2000 is \$630,000. An additional Capital requirement of \$150,000 will be identified in the 2001 Budget process.

FINANCIAL STATEMENT AND APPROVAL

	141238	900602
	\$	\$
Approved Budget To Date	501,691	0
Transfer from Water Fund Reserves	<u>45,500</u>	<u>630,000</u>
New Authority/Revised Budget	547,191	630,000
Total Paid and Committed	<u>(421,828)</u>	<u>0</u>
Balance Remaining	<u>125,363</u>	<u>630,000</u>

Funds in the amount of \$45,500 are available for transfer from the Water Reserve Fund to Cost Centre 141238, Quality Control. Funds in the amount of \$630,000 are available for transfer from the Water Capital Reserve Fund to Internal Order 900602, Drinking Water Protection Regulatory Changes.

*Approved by  
Nancy B. Schepers, P.Eng.*

AP/DW/jw

FINANCE DEPARTMENT COMMENT

Funds are available as indicated. In accordance with Financial Guideline 5.2.d, Ottawa Transition Board approval is required.

*Approved by T. Fedec  
on behalf of the Finance Commissioner*