

A clear, faceted glass tumbler is centered in the image, resting on a speckled granite countertop. The glass has a wide rim and a base with intricate cut-crystal patterns. The background is a close-up of the granite surface, showing various shades of brown, red, and grey. The text is overlaid on the glass in a white, serif font.

**ADVISORY COUNCIL ON  
DRINKING WATER QUALITY  
AND TESTING STANDARDS  
ANNUAL REPORT 2004-2005**

## Table of Contents

Chair's Message .....	3
Council Mandate .....	4
Requests from the Minister: .....	6
Regulation 170/03 Requirements for Smaller, Private Systems .....	6
Regulation 903/90 Disinfection Requirement .....	8
Justice O'Connor Priorities .....	9
Recommendation #27 (Replacing the Total Coliform test with the <i>E. coli</i> test) .....	9
Recommendation #28 (Protozoa Treatment Standard) .....	12
Recommendation #29 (Desirability of a Lower Turbidity limit) .....	13
Recommendation #31 (Disinfection By-Products Review) .....	13
<i>Procedure for Disinfection of Drinking Water in Ontario</i> Review .....	14
Standards Review .....	15
Arsenic .....	15
Chlorite/Chlorate .....	15
Microbiological Quality of Drinking Water .....	15
Methyl tertiary-butyl ether .....	16
Trichloroethylene .....	16
Trihalomethanes .....	16
Turbidity .....	16
Appendices .....	17
Appendix A - Overview of Relevant Legislation & Regulations .....	18
Appendix B - Council Members' Biographies .....	19
Appendix C - Key Dates / Chronology .....	22
Appendix D - Council's Standards Review Protocol .....	23
Appendix E - Publications .....	32
Appendix F - Terms of Reference .....	33
Appendix G - Website .....	40
Appendix H - Contact Information .....	41

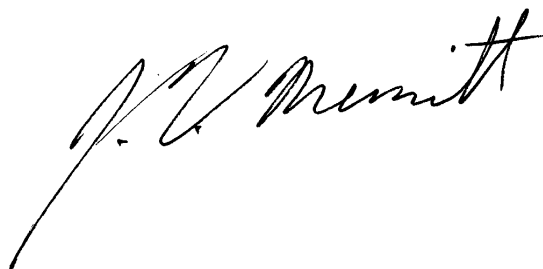
## **Chair's Message**

On behalf of the Advisory Council on Drinking Water Quality and Testing Standards, I am pleased to provide this, our first Annual Report, outlining the achievements of the Council from May 12, 2004 to May 11, 2005. It has been a pleasure to work with the members, who are a group of professionals in the drinking water sector, with a sincere view of protecting and improving the safety and quality of drinking water in the Province of Ontario.

From the first meeting in June, 2004, it has been our approach to immediately start to address issues and concerns that have the greatest potential to affect drinking water safety. The Minister of the Environment, the Honourable Leona Dombrowsky, gave us a comprehensive and practical mandate and has continued to strongly support the work of the Council and has listened to our advice.

The Council reviewed a number of drinking water standards and dealt with several Walkerton Recommendations and a significant portion of our first year was devoted to the review of the Province's Drinking-Water Systems Regulation (O. Reg. 170/03). This review was brought to completion and the Ministry of the Environment is in the process of implementing our advice.

I look forward to a very active new year and the continued support of both the Minister of the Environment and Ministry of the Environment staff, and I would like to thank the members who have taken the time from their very busy schedules to selflessly support the work of the Council.



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Jim Merritt

## **Council Mandate**

Justice O'Connor, in the Part Two Report of the Walkerton Inquiry, made six recommendations regarding an "advisory council on standards". Specifically, Recommendation 25 states that "*In setting drinking water standards for Ontario, the Minister of the Environment should be advised by an Advisory Council on Standards*".

To this end, on May 12, 2004, The Minister of the Environment established the "Advisory Council on Drinking Water Quality and Testing Standards" and asked for recommendations regarding the province's drinking water standards and related measures that may be needed to improve the safety and quality of Ontario's drinking water supply.

The Minister of the Environment appointed members from key professional fields representing a cross-section of academia, industry and municipalities, with expertise in the areas of microbiology, toxicology, engineering, utility operations, public health, and other organizations with a record of interest and accomplishment in areas related to drinking water. They are active in their areas of knowledge and brought their current and direct experience to the Council. See Appendix B for the Members' biographies.

Enabled under the *Safe Drinking Water Act, 2002*, the Council's broad mandate is to consider issues relating to standards for drinking water quality and testing and to make recommendations to the Minister of the Environment, which are to be taken into consideration in establishing and revising standards for drinking water quality and testing, under the *Safe Drinking Water Act, 2002*.

In considering drinking water standards, testing standards and issues, as well as providing advice and recommendations, the role of the Council includes, but is not necessarily limited to, the following core areas:

### **Standards Setting and Implementation**

- Reviewing research, scientific, and technical documentation related to drinking water quality and testing standards in order to provide advice to the Minister of the Environment on Ontario's approach to standard setting, and assessing and providing advice on proposed standards and their applicability in Ontario, including research needs and issues management.

### **Priority Setting**

- Reviewing priorities suggested by Federal-Provincial-Territorial Committee on Drinking Water and recommending the addition, deletion, bumping-up, or bumping-down of standards on the Federal-Provincial-Territorial agenda.

### **Stakeholder Consultation**

- Publishing information on the Environmental Registry and undertaking independent consultations with and soliciting views from the general public on standards, regulations, or other drinking water issues, and providing recommendations to the Minister on the outcomes of consultations.

### **Requests for Advice**

- Responding to requests by the Minister of the Environment to provide advice on policies, practices and procedures to be used in the development of standards, and priorities for the development of standards, testing methods and related research.

### **Emerging Issues**

- Assessing drinking water issues in Ontario and providing recommendations to the Minister of the Environment on matters that the Council has identified as being a priority, and which merit the attention of the Ministry of the Environment.

### **Inaugural Year of the Council (May 12, 2004 to May 11, 2005)**

- Established an office at 40 St. Clair Avenue West, Toronto (See Appendix H)
- Retained two full-time staff:
  - Scott Barrett, Executive Assistant
  - Iris Biggar, Administrative Assistant
- Held inaugural meeting on June 10, 2004 with an introduction by the Minister of the Environment, and full briefings from senior Ministry of the Environment staff
- Responded to direct requests from the Minister of the Environment on O. Reg 170/03 and O. Reg. 903 (See Page 6)
- Focused on the Justice O'Connor Priorities as requested by the Minister of the Environment (See Page 9)
- Reviewed all new and revised drinking water standards that were engaged in the Federal-Provincial-Territorial process (See Page 15)
- Met monthly and created ad hoc working groups to address certain issues in greater detail
- Finalized Terms of Reference (See Appendix F)
- Developed a website, which provided information on the Council's activities relating to Justice O'Connor priorities, standards review, and requests from the Minister of the Environment, for use by the general public and Ministry of the Environment staff (See Appendix G)
- Developed a protocol to guide the Council through the process of undertaking the review of drinking water standards, in concert with the Federal-Provincial-Territorial process (See Appendix D)

## **Requests from the Minister:**

### **Regulation 170/03 Requirements for Smaller, Private Systems**

On June 30, 2004, the Minister of the Environment asked the Council to provide advice on the Drinking Water Systems Regulation (O. Reg. 170/03) with respect to the appropriateness of requirements for small water systems, and particularly private ones, keeping in mind the province's commitment to implement all of Commissioner O'Connor's recommendations.

The Council undertook an initial review and concluded that the Regulation, as it applied to smaller and private systems, was considered to be costly and complex. Although the Ministry of the Environment targeted information to specific groups, the Regulation appeared to be not well understood by the regulated community.

Therefore, the Council needed to gain a broader understanding of the range of issues arising from the Regulation, relating to smaller, private systems, and its potential implications for affected and interested parties, before providing recommendations to the Minister. The Council also felt it needed more information on the health risks posed by small systems.

In its review, the Council examined the Regulation from a variety of perspectives, including:

- A review of the Walkerton Reports and discussions with people who participated in the development of the Part Two report. Particular attention was given to Chapter 14, Small Drinking Water Systems and the Recommendations in this Chapter.
- An extensive Consultation Process where Council members heard from over 120 presenters in 12 locations. In addition, the Council received over 100 written submissions. The Council heard a wide range of concerns with the Regulation and a number of suggestions for improvement.
- The Council collected information on how other jurisdictions and countries were endeavoring to enhance and regulate the safety of drinking water provided by small communal systems and systems that provide water to the public.
- The Council also heard from experts in the drinking water field in addition to the expert knowledge of the Council's own members. A number of actual cases of drinking water contamination were analyzed.

After this careful review of the current Regulation as it applies to smaller, private systems, the Council concluded the problems with the Regulation could not be remedied through specific changes to the current Regulation.

The Council found that the Regulation seemed to be effective for larger systems serving larger communities and even for larger private operations that had the scale and revenue base and size of business to manage the complexities of the Regulation and install and operate treatment systems. Very small services such as bed and breakfast operations, church and community centres, small lodges, camps and cabins, trailer parks, seasonal operations and a wide range small businesses did not have the resources, knowledge or skills to be able to follow or comply with the type of regulatory structure as set out in the Regulation.

As such the Council found that an alternative approach, which addressed the capacities and abilities of the small service owners and operators, was needed for these smaller systems, without compromising the basic drinking water quality standards and level of safety.

Through the development of a new regulation, under the *Safe Drinking Water Act*, it was recommended that the Public Health Units be empowered to allow them to administer safe drinking water programs for these smaller systems.

The Council's recommended approach consisted of the following key elements:

- **A risk-based, site-specific approach for 5 of the 8 “Categories of System” under Regulation 170/03, which include: Large Municipal Non-Residential, Small Municipal Non-Residential, Non-Municipal Seasonal Residential, Large Non-Municipal Non-Residential, and Small Non-Municipal Non-Residential; as well as any Designated Facilities within these 5 categories**
- **The remaining 3 categories under Regulation 170/03, which include: Large Municipal Residential, Small Municipal Residential, and Non-Municipal Year-Round Residential, are to continue to be regulated under the current Regulation 170/03**
- **Risk-based, site-specific approach to be outcome-based, anchored by compliance with the Ontario Drinking Water Quality Standards**
- **Transfer of responsibility to Public Health Units to administer the safe drinking water programs for all commercial and institutional systems that serve the public**
- **Extension of the provincial grant program to assist local municipalities in providing assistance to Non-Municipal, Year-Round Residential systems**

On February 8, 2005, the Council delivered its final report on Regulation 170/03 to the Minister of the Environment, and the report was then released to the public on March 22, 2005. The full report can be found on the Council's website at:

[http://www.odwac.gov.on.ca/reg\\_170/020805\\_Reg\\_170\\_Final\\_Report.pdf](http://www.odwac.gov.on.ca/reg_170/020805_Reg_170_Final_Report.pdf)

## **Regulation 903/90 Disinfection Requirement**

On June 30, 2004, the Minister of the Environment formally asked the Council to provide advice on the disinfection (chlorination) requirement of Regulation 903.

The Council decided to take on a broader review of this issue. As such, the scope of its advice will not be limited exclusively to the concerns raised by the Canadian Environmental Law Association (CELA) in their 2003 Environmental Bill of Rights Application for Review.

The overarching principle for our focus on this issue is that water from private drinking water wells needs to be verified to be microbiologically safe, prior to human consumption.

The Council heard from experts on wells and Regulation 903, including Ministry of the Environment staff, the Ontario Ground Water Association, and CELA; reviewed literature on disinfecting wells and; has drawn from our own Council members' expertise in this area, and has discussed a variety of technical issues related to drinking water safety and practical applications for well disinfection.

As of May 11, 2005, the Council is continuing to complete its final advice to the Minister of the Environment.

## Justice O'Connor Priorities

At the Council's inaugural meeting on June 10, 2004, the Minister of the Environment asked the Council to first focus on the immediate priorities recommended by Justice O'Connor, in the Part Two Report of the Walkerton Inquiry.

Following is an update on the status of the Council's progress, as of May 11, 2005, on the following Part Two Report of the Walkerton Inquiry recommendations:

- Recommendation #27 (Replacing the Total Coliform test with the *E. coli* test)
- Recommendation #28 (Protozoa Treatment Standard)
- Recommendation #29 (Desirability of a lower Turbidity limit)
- Recommendation #31 (Disinfection By-Products Review)

### **Recommendation #27 (Replacing the Total Coliform test with the *E. coli* test)**

In his Part Two Report of the Walkerton Inquiry, Justice O'Connor referred to microbial risks as acute risks. Microbial contamination was a primary factor leading to the outbreak of waterborne disease in Walkerton Ontario in the spring of 2000. In fact, the Inquiry report states that "Globally, the contamination of water by pathogenic organisms poses the most significant threat to the health of humans."

It is in this context, and with an understanding that it is the testing for indicators of fecal contamination of water, rather than the testing for the pathogens themselves, that currently provides drinking water purveyors with a means of assessing the safety of drinking water that Recommendation 27 of the Inquiry Report was developed.

Recommendation 27 states that:

*"The Advisory Council on Standards should consider whether to replace the coliform test with an E. coli test."*

The Council interpreted this recommendation in a broader fashion and has reviewed the appropriateness of several microbial indicators of adverse water quality, as defined in the Ontario Drinking Water Quality Standards and Drinking Water Systems Regulations.

In reviewing these indicators, the Council drew upon various technical documents including those prepared by Ministry of Environment staff and those posted for public comment in support of the Guidelines for Canadian Drinking Water Quality. The Council also drew upon the extensive knowledge and experience of its own members in developing its recommendations.

In evaluating the available information, it was the Council's opinion that the fundamental weighting of indicators of microbial safety as expressed in the Guideline supporting documents is based on sound scientific interpretation and judgment. The Council therefore endorses the use of these documents, prepared by the Federal-Provincial-Territorial Committee on Drinking Water, as information to support its recommendations.

The recommendations provided focus on principle rather than detail. It is the Council's expectation the recommendations will be used by the Ministry of the Environment to develop specific regulatory revisions in order to facilitate the implementation of these principles. Following are the Council's recommendations, which were formally transmitted to the Minister of the Environment on April 5, 2005, pertaining to each indicator which has been reviewed as well as a brief rationale for the recommendation:

### **1. *E. coli* vs. Fecal Coliforms**

#### Recommendation

The Council recommended that the use of fecal coliforms as an indicator of public health risk be discontinued and that *E. coli* be used as the sole indicator of recent fecal contamination.

This recommendation is based on the fact that *E. coli* is generally considered to be a definitive indicator of the presence of fecal matter. Also, methods are readily available and economical for the enumeration of *E. coli* in drinking water. Fecal coliforms indicate the presence of thermo-tolerant coliform bacteria and are, therefore, somewhat ambiguous in their indication of fecal contamination. Removal of the fecal coliform test in favour of the *E. coli* test will not result in an increase in health risk and would place little or no additional burden on regulated systems.

### **2. Total Coliforms**

#### Recommendation

The Council recommended that the Ontario Drinking Water Quality Standard for total coliform bacteria be retained. However, the Council felt that the prescriptive requirements arising from detection of coliform bacteria may, in some cases, be unduly severe. Specifically, the Council recommended that the decision to provide advice to customers that an alternate source of water be used, or that the water be boiled prior to consumption, should be subject to the discretion of the local Medical Officer of Health in consultation with the Ministry of the Environment.

Coliform bacteria have had a longstanding history of use as indicators of drinking water safety. However, their utility in this respect has been subject to review subsequent to the development of methodologies facilitating testing specifically for *E. coli*.

While coliform bacteria may indicate the presence of fecal matter, they suffer from significant ambiguity in this regard. This arises from the fact that coliform bacteria presence may be attributed to growth and persistence in an environment not subject to fecal contamination. As coliform bacteria may grow and persist within an otherwise well managed drinking water system, their presence may well be indicative of a need for intervention but is not a definitive indicator of unsafe water.

At the same time, there is an enduring understanding that coliform bacteria are readily inactivated by standard disinfection practices and an expectation that they should not be present in drinking water following treatment. Therefore, their presence, immediately following disinfection, can indicate an operational deficiency that may result in risk to health, should pathogens be present in the source water.

The Council, in considering this apparent dichotomy of thought, concluded that the standard for coliform bacteria should remain in place as well as the testing requirement. The Council does, however, suggest that the presence of coliform bacteria be considered as part of a more comprehensive assessment of system operation and analytical findings, when health-based decision making is at stake. This approach is particularly applicable in situations where coliform presence is detected within a distribution system but not at the treatment facility. Adverse result notification and re-sampling requirements should remain in place but subsequent actions should be dependant on further assessment and subject to the discretion of the local Medical Officer of Health.

### **3. Background Colony Counts on the Total Coliform Membrane Filter**

#### Recommendation

The Council recommended that all references to background colony counts on the total coliform membrane filter be removed from the Ontario Drinking Water Quality Standards and Drinking Water Systems Regulations.

As background counts are not specifically tested for, their determination is incidental to performing coliform tests. Background counts are a poor and inconsistent indicator of the general bacterial population as enumeration is subject to influences dependant on the specific coliform test method employed. As well, the use of this indicator is virtually unheard of in other jurisdictions. The presence of elevated background colony counts on a membrane filter may interfere with the enumeration of coliform bacteria. As a result, coliform test results may be invalidated and re-sampling may be required.

The Drinking Water Testing Services Regulation provides an instrument for ensuring proper testing procedures, and thus pre-empting the reporting of invalid coliform test results due to high background levels. In and of itself, this parameter does not provide any indication of the true safety of water.

#### **4. Colony Counts on a Heterotrophic Plate Count**

##### Recommendation

The Council recommended that heterotrophic plate count be removed from the Ontario Drinking Water Quality Standards Regulation and as an indicator of adverse water quality in the Drinking Water System Regulation. Since the Council believes that heterotrophic plate count could be of value in indicating an operational deficiency or potential deterioration in water quality, it is recommended that heterotrophic plate count be designated as an operational parameter. However, a numerical value should not be assigned and deterioration of quality should be assessed on the basis of an increase in counts above the normal baseline of a given system.

Heterotrophic plate count has long been used as an indicator of general bacterial population. However, only a limited number of bacteria actually present are enumerated and the variety of methods available for determining this parameter do not produce consistent results.

Furthermore, there is general consensus in the scientific community that the heterotrophic plate count should not be used in isolation for public health decision making. Heterotrophic bacteria may grow and persist within distribution systems but such presence, in itself, does not signify risk to health.

As a sudden or unexpected increase in heterotrophic plate count may be an early signal of water quality deterioration and / or an increase in the vulnerability of a system, the Council considers it to be an effective tool, when used judiciously. The Council does not recommend that monitoring for this parameter be mandatory but does encourage its use as a best practise. The MOE may choose to evoke a testing requirement through its various instruments, such as Certificates of Approval, when concerns have arisen regarding the quality of water and operational effectiveness of a system.

It is felt that the foregoing recommendations are based on a sound understanding of current scientific knowledge concerning microbial indicators of water safety. It is anticipated that the implementation of these recommendations would result in effective risk management and at the same time support the effective and efficient use of resources.

#### **Recommendation #28 (Protozoa Treatment Standard)**

Recommendation 28 states that:

*“No formal maximum contaminant level for protozoa should be established until real-time tests are available. The objective, as with bacteriological and viral pathogens, should be zero, and the regulations should so state; but the standard should be a treatment standard, specified in terms of log removal dependent on source water quality.”*

Even though public consultation on a proposed Canadian Drinking Water Guideline for Protozoa was undertaken in 1998, Ontario has decided to address the implementation of a Protozoa Treatment Standard through inclusion in the “*Procedure for Disinfection of Drinking Water in Ontario*” which is under public consultation from April 5, 2005 to June 13, 2005.

The Council decided that, since a Protozoa Treatment Standard is already being implemented by the Ministry of the Environment, a *specific* review was not necessary.

The Council, however, has chosen to review the Protozoa Treatment Standard in the context of a holistic review of the “*Procedure for Disinfection of Drinking Water in Ontario*”, and, as of May 11, 2005, continues to assess the areas of focus.

### **Recommendation #29 (Desirability of a Lower Turbidity limit)**

Recommendation 29 states that:

*“The provincial government should seek the advice of the Advisory Council on Standards regarding the desirability of a turbidity limit that is lower than the limit specified in the federal-provincial Guidelines.”*

The Council conducted an initial review and endorsed Health Canada’s proposed Guideline but requested more time to review the impacts to Ontario systems and the implications for implementation prior to providing formal advice to the Minister of the Environment.

The Council will also be addressing “*the desirability of a turbidity limit that is lower than the limit specified in the federal-provincial guidelines*” through its holistic review of the “*Procedure for Disinfection of Drinking Water in Ontario*”.

### **Recommendation #31 (Disinfection By-Products Review)**

Recommendation 31 states that:

*“The Advisory Council on Standards should review Ontario’s standards for disinfection by-products to take account of the risks that may be posed by the by-products of all chemical and radiation-based disinfectants.”*

Having undertaken a preliminary review of issues relating to Disinfection By-Products (DBPs), the Council concluded that the list of different DBPs is actually not as large as was originally envisaged.

This results from the relatively limited number of treatment technologies used across the province. It was also noted that if circumstances warranted unique monitoring, the Certificate of Approval system would build in any DBP monitoring requirements and limits.

As such, it was concluded that a process of providing overall advice on DBPs, on an on-going basis, would be addressed by reviewing individual DBP standards, based on the review of the associated treatment technology.

Further advice will be included in the Council's review of the "*Procedure for Disinfection of Drinking Water in Ontario*".

### ***Procedure for Disinfection of Drinking Water in Ontario Review***

The Council has begun to identify the actions and next steps that should be taken regarding the review of the "*Procedure for Disinfection of Drinking Water in Ontario*", which is currently posted for public consultation until June 13, 2005.

It was decided that the Council's direction would be to provide broad advice on improvements that could be made to the "*Procedure for Disinfection of Drinking Water in Ontario*" in order to enhance and clarify its content and intention.

It should be noted that this Procedure encompasses three Walkerton Recommendations: (Recommendation #28: Protozoa Treatment Standard; Recommendation #29: Lower Turbidity Limit and; Recommendation #31: Disinfection By-Products Review). As such, the Council determined that a holistic review of the Procedure would serve our purposes of meeting the intent of the above-noted 3 Walkerton recommendations.

## Standards Review

Several drinking water standards were reviewed by the Council in response to our mandate and Recommendation 25 of the Part Two Report of the Walkerton Inquiry, which states that “*In setting drinking water standards for Ontario, the Minister of the Environment should be advised by an Advisory Council on Standards*”.

Following is an update of the status of our review of each of the standards, as of May 11, 2005:

### Arsenic

The Council reviewed Health Canada’s “Arsenic in Drinking Water” Document for Public Comment. The public comment period finishes May 17, 2005. As such, a final Canadian Drinking Water Guideline had not been posted, as of May 11, 2005. The Council will continue to review this standard and will be providing advice to the Minister of the Environment on both the numerical value and its application in Ontario.

### Chlorite/Chlorate

The Council reviewed Health Canada’s “Chlorite and Chlorate in Drinking Water” *Draft* Document for Public Comment. However, as of May 11, 2005, it had not been posted for public comment either federally or through Ontario’s Environmental Bill of Rights process. The Council will be reviewing this standard and will be providing advice to the Minister of the Environment on both the numerical values and their application in Ontario.

### Microbiological Quality of Drinking Water

The Council reviewed Health Canada’s *Documents for Public Review* with regards to *Microbiological Quality of Drinking Water* for:

- Bacterial Waterborne Pathogens: Current and Emerging Organisms of Concern;
- Heterotrophic Plate Count;
- Total Coliforms; and
- *Escherichia coli*

The review of these 4 documents aided in the formulation of the Council’s formal advice to the Minister of the Environment on Recommendation #27 of the Part Two Report of the Walkerton Inquiry, which states that “*The Advisory Council on Standards should consider whether to replace the coliform test with an E. coli test.*” See page 9 for the Council’s rationale and conclusions.

## **Methyl tertiary-butyl ether**

The Council reviewed Health Canada's Methyl tertiary-butyl ether "MTBE in Drinking Water" Draft Document for Public Comment. However, as of May 11, 2005, it had not been posted for public comment either federally or through Ontario's Environmental Bill of Rights process. The Council will be reviewing this standard, which is an Aesthetic Objective, and will be providing advice to the Minister of the Environment on both the numerical value and its application in Ontario.

## **Trichloroethylene**

The Council reviewed Health Canada's "Trichloroethylene in Drinking Water" (TCE) Document for Public Comment. The public comment period finished April 05, 2004, and as of May 11, 2005, a final Canadian Drinking Water Guideline had not been posted. However, the Council recommended that the Ministry of the Environment endorse this Guideline, but requested time to review the impact on Ontario systems and implications for implementation, prior to recommending its adoption as an Ontario Drinking Water Quality Standard.

## **Trihalomethanes**

The Council reviewed the "Trihalomethanes in Drinking Water" (THMs) Document for Public Comment, which was posted until January 07, 2005, and received documentation and briefings on THMs as provided through the Committee on Drinking Water (CDW).

The Council concerns included issues of sampling and reporting of results, as well as the implications of an 80 vs. 100 ug/l Standard level.

The Council continues to review the THMs Standard and will provide advice to the Minister of the Environment on both the numerical value and its application in Ontario, once more information is received on how the two levels relate to risk factors.

## **Turbidity**

The Council reviewed Health Canada's "Guidelines for Canadian Drinking Water Quality: Supporting Documentation – Turbidity". The public comment period will end on June 13, 2005, and, as such, a final Canadian Drinking Water Guideline has not been posted. However, the Council previously recommended that the Ministry of the Environment endorse this Guideline, but requested more time to review the impact on Ontario systems and implications for implementation, prior to recommending its adoption as a performance standard.

The Council will also be addressing Turbidity through its holistic review of the "*Procedure for Disinfection of Drinking Water in Ontario*".

## **Appendices**

Appendix A - Overview of Relevant Legislation & Regulations

Appendix B - Council Members' Biographies

Appendix C - Key Dates / Chronology

Appendix D - Council's Standards Review Protocol

Appendix E - Publications

Appendix F - Terms of Reference

Appendix G - Website

Appendix H - Contact Information

## **Appendix A - Overview of Relevant Legislation & Regulations**

- ***Safe Drinking Water Act, 2002, Sections 4-5***

### **Advisory Council on Drinking-water Quality and Testing Standards**

**4. (1)** The Minister shall establish an advisory body known in English as the “Advisory Council on Drinking-water Quality and Testing Standards” and in French as “Conseil consultatif sur les normes de qualité et d’analyse de l’eau potable” to consider issues relating to standards for drinking-water quality and testing and to make recommendations to the Minister. 2002, c. 32, s. 4 (1).

### **Appointment of members**

**(2)** The members of the Advisory Council shall be appointed by the Minister. 2002, c. 32, s. 4 (2).

### **Notice**

**(3)** The Advisory Council may publish information in the Registry. 2002, c. 32, s. 4 (3).

### **Consideration by Minister**

**5.** The Minister shall ensure that all recommendations of the Advisory Council on Drinking-water Quality and Testing Standards are taken into consideration in establishing and revising standards under this Act for drinking-water quality and testing. 2002, c. 32, s. 5.

- ***Ontario Drinking-Water Quality Standards (Ontario Regulation 169/03)***
- ***Drinking-Water Systems (Ontario Regulation 170/03)***
- ***Drinking-Water Testing Services (Ontario Regulation 248/03)***
- ***Wells (R.R.O. 1990, Ontario Regulation 903)***

## **Appendix B - Council Members' Biographies**

### **Dr. Robert Andrews**

Dr. Andrews is a Professor and Associate Chair of Research in the Department of Civil Engineering at the University of Toronto. He is a 2003 co-recipient of the National Science and Engineering Research Council (NSERC) Synergy Award for University-Industry Partnerships. He currently serves on the NSERC Civil Engineering Grant Selection Committee and the Council of Research Managers - Great Lakes International Joint Commission. Dr. Andrews also serves on the American Water Works Association (AWWA) Disinfection Committee, and on the Ontario Water Works Association's Distribution System Committee. He has extensive experience in Drinking Water Treatment and Disinfection.

### **Dr. Ronald W. Brecher**

Dr. Brecher is a founding partner of GlobalTox International Consultants - a Canadian corporation that assesses the impact of toxic chemical exposures on human health. Dr. Brecher is one of about 35 Canadians certified by the American Board of Toxicology. He is an Adjunct Professor, School of Planning, at the University of Waterloo and Associated Graduate Faculty, Department of Biomedical Sciences at the University of Guelph. From 1994-2002, he was a director of the Children's Groundwater Institute. He is a past recipient of the National Science and Engineering Research Council's Industrial Research Fellowship. He is a member of the Science and Policy Advisory Board of the American Council of Science and Health.

### **Michèle Giddings**

Ms. Giddings is the Manager of the Water Quality and Science Division in the Water Quality and Health Bureau, Healthy Environments & Consumer Safety Branch, Health Canada, with nearly 20 years experience in the drinking water program. She is on Health Canada's Secretariat for the Federal-Provincial-Territorial Committee on Drinking Water. She is also currently co-coordinator of the Disinfectants and Disinfection By-products Working Group for the World Health Organization's (WHO) Guidelines for Drinking Water Quality. Ms. Giddings has developed a number of drinking water guidelines for Health Canada and WHO and has been an advisor to the U.S. EPA on a number of drinking water-related issues. She is also a member of the American Water Works Association (AWWA) and the Ontario Water Works Association (OWWA).

### **Rod Holme**

Mr. Holme is former Vice President of the Water and Wastewater division of Earth Tech Canada and is currently an independent consultant on drinking water. He is Past President of American Water Works Association and currently chairs their International Council. He is also Chair of the Joint Committee on Water Regulations for the Ontario Water Works Association and the Ontario Municipal Water Association. He has extensive experience in technical and project management in municipal water supply.

**Dr. Peter Huck**

Dr. Huck is a Professor in the Department of Civil Engineering, NSERC Chair in Water Treatment and University Research Chair at the University of Waterloo. He has undertaken extensive research in water quality and treatment in areas such as the robustness of water treatment systems, membrane and UV treatment, the removal of *Cryptosporidium* pathogen loadings in watersheds, among other topics.

**Dr. Alexander Hukowich**

Dr. Hukowich is the Associate Medical Officer of Health, Haliburton Kawartha, Pine Ridge Health Unit and the appointed coroner for Northumberland County. He also serves as Chair of the Association of Local Public Health Authorities' Advocacy Committee. He is a member of the Association of Local Public Health Authorities.

**Mrs. Marilyn Lee**

Mrs. Lee is a trustee of the Environmental Health Foundation of Canada and a member of the Joint Committee on Drinking Water Treatment Units (NSF). She is a professor in the School of Occupational and Public Health, Ryerson University, where she teaches courses on water quality, food pathogens, parasitology, and infection control. She is also a Certified Public Health Inspector and worked for 6 years in a general program of public health inspection with the Wellington-Dufferin-Guelph Health Unit. Her published work primarily deals with food pathogens, which include *Giardia*, the coccidial parasites, and *E. coli O157:H7*.

**Jim Merritt**

Mr. Merritt is an independent consultant on environmental services, municipal infrastructure and water management. He is a former Assistant Deputy Minister of Operations at the Ontario Ministry of the Environment. Mr. Merritt led the establishment of the Ontario Clean Water Agency and served as Vice President of Operations and Vice President of Information and Technology.

**Dr. Harold Richardson**

Dr. Richardson is the managing director of the Quality Management Program - Laboratory Services of the Ontario Medical Association. He also serves as the Vice-chair of the National Committee on Medical Laboratory Quality Systems of the Canadian Standards Association. He is a former chair of McMaster University's Medical Microbiology and Infectious Diseases program, and is past president of the Canadian Association of Medical Microbiologists. As well, Dr. Richardson is Professor emeritus, Pathology and Molecular Medicine, McMaster University, and is a member of the Ontario Medical Association.

**Dr. Ken Roberts**

Dr. Roberts has over 30 years' experience in the field of drinking water treatment engineering and groundwater management. He currently works for XCG Consultants Ltd. Prior to joining XCG, and has served in a number of water-quality-related positions in the Ontario Ministry of the Environment. Mr. Roberts is a member of the American Water Works Association and the AWWA's Research Foundation.

**John Rudnickas**

Mr. Rudnickas is the Manager of Water Quality for the City of Toronto. A chemist by training, he has extensive experience in all aspects of quality assurance/quality control in a large drinking water system. He is responsible for the management of the City of Toronto's accredited and licensed laboratory for drinking water testing. He is a member of the Ontario Water Works Association and is on the Water Quality Committee of the Canadian Water and Wastewater Association. He is also a member of the American Water Works Association.

**Dr. Mark Servos**

Dr. Servos is the Scientific Director of the Canadian Water Network, a national network of Centres of Excellence involving 30 universities across Canada. He is a professor in the Department of Biology, at the University of Waterloo, where his research focuses on risk assessment and risk management of emerging water quality issues such as endocrine disruption and pharmaceuticals in the environment. He is the former Project Chief for the Priority Substances Exposure Project for the National Water Research Institute. He is a former member of the board of directors of the Society of Environmental Toxicology and Chemistry and the International Association of Great Lakes Research.

**Dr. Lesbia F. Smith**

Dr. Smith is Assistant Professor at the University of Toronto and Clinical Research Associate of the McMaster University Institute of Environment and Health. Dr. Smith holds a Medical degree, and is the former head of the Environmental health and Toxicology Unit of the Public Health Branch of the Ontario Ministry of Health. Dr. Smith has researched drinking water quality and chronic diseases such as non-bladder cancer (by-products of chlorination) and Alzheimer's disease (aluminum). She has participated in the development of several Ontario drinking water standards. Her current work relates to ecological and human impacts of industrial emissions through human and ecological risk assessments including studies of the impacts on health of surface waters affected by a variety of industrial contaminants.

**Robert Walton**

Mr. Walton is Director of Public Works for the County of Oxford. He is the former Manager of Water and Wastewater Services. Prior to joining the County of Oxford, Mr. Walton worked as a consulting engineer. As a consultant, Mr. Walton worked for a number of small rural municipalities and has design and management experience with small water systems. Mr. Walton is a member of the Ontario Municipal Water Association and has served on the Drinking Water Committee of the Association of Municipalities of Ontario. He is also a member of the Ontario Municipal Water Association.

## Appendix C - Key Dates / Chronology

May, 2000	Walkerton Tragedy
January 14, 2002	Part 1 Report of the Walkerton Inquiry released
May 23, 2002	Part 2 Report of the Walkerton Inquiry released
December 13, 2002	Safe Drinking Water Act receives Royal Assent
May 12, 2004	Minister announces establishment of the Council
June 10, 2004	Inaugural Council meeting
June 30, 2004	Minister requests Council to provide advice on appropriate requirements for smaller water systems, particularly private ones, with respect to Ontario Regulation 170/03.
June 30, 2004	Minister requests Council to advise on the disinfection (chlorination) requirement of Ontario Regulation 903
February 8, 2005	Council delivers Regulation 170/03 Report to the Minister of the Environment
March 22, 2005	Minister of the Environment releases Council's Regulation 170/03 Report to the public.
May 11, 2005	Council's Fiscal Year end
July 31, 2005	Council's Annual Report due

## Appendix D - Council's Standards Review Protocol

The following overview and specific explanation of the Council's engagement stages was developed to focus and guide the Council in providing timely advice to the Minister of the Environment on the endorsement of Canadian Drinking Water Guidelines, their subsequent adoption as Ontario Drinking Water Quality Standards, and their implementation in Ontario.

### Overview Table:

<b>Federal Engagement</b>	<b>MOE Engagement</b>	<b>Advisory Council Engagement Stages</b>	
<b>National Priority List Formulation</b>	MOE Interest	<b>1</b>	<b>Convey Council's Ontario Substances of Interest for Consideration on National Priority List</b>
<b>Priority Setting</b>	Input into Priorities	<b>2</b>	<b>Review National Priority List</b>
<b>National Process</b>			
Scientific & Technical Review		<b>3</b>	<b>Assess Initial Ontario Standard</b>
- Risk, Treatability, Data Collection			
Draft Guideline Document	Review & Comment	<b>4</b>	<b>Assess "Document for Public Review"</b>
Consultation		<b>5</b>	<b>Propose Interim Ontario Standard (If required)</b>
- National			
- Ontario	Ontario Position	<b>6</b>	<b>Undertake Independent Consultation (If required)</b>
Draft Final Guideline Document	Review & Comment	<b>7</b>	<b>Assess Draft Final Guideline Document</b>
<b>Final Guideline (CDWG)</b>	Develop Ontario Standard	<b>8</b>	<b>Propose Ontario Standard and Implementation</b>

## **Advisory Council Engagement Stage 1 Description for Standards Review:**

### **Convey Council's Ontario Substances of Interest for Consideration on National Priority List**

The question before the Council at this stage is:

*Are there any substances of interest that are not already on the National Priority List?*

Aspects to consider when conveying our interest:

- Does the substance have an adverse health effect?
- Is the substance known or likely to occur at levels of concern?
- Would regulating the substance provide a meaningful opportunity for risk reduction?
- Would research of this substance (which could include collecting occurrence data, treatment data, health effects data, and developing analytical methods) constitute a good use of resources and funding?

The national priority setting process begins in the fall of each year, so it was decided, that to allow enough time for the conveyance of the Council's interests, the Council will focus on its priority setting at the June meeting of every year, starting in 2005.

Other Notes:

- Must account for emerging and emergency situation parameters (like NDMA)
- Can bump up (or bump down parameters)
- Can also drop parameters from the list
- Minister may call on us at any time for advice

**Input:** Ministry of the Environment Liaison member to supply the Council with the *proposed* National Priority List for review. Council members then identify substances of interest (that are not on the list) and prepare for their discussion at the June meeting of every year.

**Output:** Council to submit a list of substances of interest to the Minister for consideration for inclusion in Ontario's Standards Plan, and input into the Federal-Provincial-Territorial process.

## **Advisory Council Engagement Stage 2 Description for Standards Review:**

### **Review National Priority List**

The question before the Council at this stage is:

*Are there any substances that the Council recommended for inclusion on the National Priority List (Stage 1), that did not make the List, and, if so, what action should the Council take?*

Other Notes:

- Can bump up (or bump down parameters)
- Can also drop parameters from the list

**Input:** Ministry of the Environment Liaison member to supply the Council with the *final* National Priority List for review, when it becomes available. Council members then review the National Priority List and identify the Council's substances of interest that did not get included on the List. The Council will then prepare for the discussion of these substances at the June meeting of every year, in order to decide what steps should be taken, including whether the Ministry of the Environment should undertake their own standard review.

**Output:** Council to convey advice on next steps for the identified Substances of Interest to the Minister for consideration by the Ministry of the Environment.

**Advisory Council Engagement Stage 3 Description for Standards Review:**

**Assess Initial Ontario Standard**

The question before the Council at this stage is:

*Does Ontario need an interim Number or Guideline while the National Process is undertaken?*

The Council will review the National Priority List to consider whether any initial Standards, or changes to existing Standards are required while the scientific and technical review is taking place.

**Input:** Council to receive, when required, documentation for review, decision sought, scientific references, and a presentation by the Ministry (including information on the range of values and possible compromises made at the national level, and known and potential contentious issues).

**Output:** Council to convey advice on possible interim standard to the Minister for consideration of implementation by the Ministry of the Environment.

## **Advisory Council Engagement Stage 4 Description for Standards Review:**

### **Assess “Document for Public Review”**

The question before the Council at this stage is:

*Does the Council have any concerns with the “document for Public Review”?*

The Council’s role in this stage is to assess “Document for Public Review” arising from the National Process, once a draft or final guideline document (slated for public consultation) has been made available to the Council.

The Council will rely primarily on the knowledge and experience of its members, and may include such aspects as economic impacts, occurrence data, treatment data, and analytical methods. There should be some consideration given to “Nice to Have” versus “Need to Have” information.

In the event that the above-mentioned aspects cannot easily be addressed, it may be determined that additional information or work is required. If so, the following process will be initiated to assist the review of the substance in question:

#### **Process for Requesting Information from the Ministry:**

1. Consult with the Ministry of the Environment’s Standards Development Branch (SDB) to clarify Council’s request
2. Consult with SDB. If deemed simple, requested information be supplied to Council through Ministry Liaison
3. Consult with SDB. If deemed complex, Ministry Liaison to provide ideas on moving forward to Council
4. If under \$25,000, Council could initiate and project-manage the research in cooperation with SDB
5. If over \$25,000, Council to formally advise Minister of study / research need

**Input:** Council to receive “Document for Public Review”, decision sought, scientific references, and a presentation by the Ministry (including information on the range of values and possible compromises made at the national level, and known and potential contentious issues), and *if required*, information per the above 5 step process for requesting information from the Minister or Ministry.

**Output:** Council to formulate and convey advice to the Minister for inclusion in the analysis and formulation of Ontario’s position.

**Advisory Council Engagement Stage 5 Description for Standards Review:**

**Propose Interim Ontario Standard**

The question before the Council at this stage is:

*Does the Council feel that an Interim Standard for Ontario should be proposed, while public consultation is being undertaken?*

The Council's role in this stage is to propose an Interim Standard for Ontario, if deemed necessary, that needs to be implemented sooner than would normally occur through the Federal-Provincial-Territorial process, to address specific Ontario concerns.

This stage differs from Stage 3 in that the Council now has more formal information contained in the "Document for Public Review" as well as additional supporting documentation that may indicate the need for earlier action by the Province.

**Input:** Council to receive documents for review, decision sought, scientific references, and a presentation by the Ministry, including information on the possible range of values, as well its implementation plan for Ontario.

**Output:** Council to formulate and convey advice to the Minister of the Environment on the proposed Interim Ontario Standard, as well as its implementation plan for Ontario.

**Advisory Council Engagement Stage 6 Description for Standards Review:**

**Undertake Independent Consultation**

The question before the Council at this stage is:

*Does the Council feel that it needs to undertake its own consultation to gain a better understanding of stakeholder and public concerns?*

The Council would consider the extent of the National and Ontario public consultations where the responses warrant the need for more clarification or understanding of the issue.

The Council could use the following consultation methods to obtain more or different information about a standard: EBR Information Posting, peer review, stakeholder information sessions, or public meetings.

**Input:** Consultation process information

**Output:** Council to use information gleaned from consultation process to provide comments back to the Minister for inclusion in Ontario's position

**Advisory Council Engagement Stage 7 Description for Standards Review:**

**Assess Draft Final Guideline Document**

The question before the Council at this stage is:

*Does the Council have any concerns with the Draft Final Guideline Document?*

This stage is positioned after public consultation, but before the Guideline, or any other document goes to the Federal-Provincial-Territorial Committee on Drinking Water (CDW) and the Federal-Provincial-Territorial Committee on Health and the Environment (CHE).

The Council's role in this stage is to assess the draft final guideline document, taking into account comments received from the National and Provincial public consultation process.

**Input:** Council to receive draft final guideline document, or any other document, as well as a summary of public comments received during the consultation period.

**Output:** Council to provide advice to the Minister of the Environment on the acceptability of the draft final guideline document, or any other document, in relation to Ontario.

## **Advisory Council Engagement Stage 8 Description for Standards Review:**

### **Propose Ontario Standard and Implementation**

The 2 questions before the Council at this stage are:

1. *Should the Ontario Standard be set at a level different from the Canadian Drinking Water Guideline?*
2. *How should the Standard be applied in Ontario?*

The Council's role in this stage is to propose an Ontario Drinking Water Quality Standard, after the final Canadian Drinking Water Guideline has been released, to provide advice on how the Standard is to be applied in Ontario, in regards to sampling, compliance, and regulation.

It should be noted that the Council would only propose an Ontario Drinking Water Quality Standard that is equivalent to or more stringent than the Canadian Drinking Water Guideline.

**Input:** Council to receive notice of final Canadian Drinking Water Guideline, as well as any issues for application in Ontario.

**Output:** Council to provide formal advice to the Minister of the Environment on the proposed Ontario Drinking Water Quality Standard, and its application in Ontario.

## Appendix E - Publications

The Advisory Council on Drinking Water Quality and Testing Standards produced one formal publication entitled:

*“Report and Advice on Ontario Regulation 170/03 Smaller, Private Systems Review and Recommendations”*, dated February 8, 2005.

On June 30, 2004, the Minister of the Environment specifically asked the Council to provide advice on the Drinking Water Systems Regulation (O. Reg.170/03) with respect to the appropriateness of requirements for small water systems, and particularly private ones, keeping in mind the province’s commitment to implement all of Commissioner O'Connor's recommendations.

This report was delivered as formal advice to the Minister and was publicly released on March 22, 2005, and is available, by quoting PIBS 5013, at:

Ministry of the Environment  
Public Information Centre  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

Tel: 416-325-4000  
Toll Free: 1-800-565-4923  
Fax: 416-325-3159  
E-Mail: [picemail@ene.gov.on.ca](mailto:picemail@ene.gov.on.ca)

The \*report can also be viewed / downloaded from the Council’s website at:

[http://www.odwac.gov.on.ca/reports/020805\\_Reg\\_170\\_Final\\_Report.pdf](http://www.odwac.gov.on.ca/reports/020805_Reg_170_Final_Report.pdf)

\*Adobe PDF format

## Appendix F - Terms of Reference

These following Terms of Reference were agreed upon by the Council and finalized by the Council's Chair and the Minister of the Environment, on November 5, 2004.

### 1. Definitions

In these Terms of Reference (TOR):

- a) "the Act" means the *Safe Drinking Water Act*;
- b) "the Council" means the Advisory Council on Drinking-water Quality and Testing Standards;
- c) "the Ministry" means the Ministry of the Environment;
- d) "the Chair" means the Chair of the Advisory Council on Drinking-water Quality and Testing Standards;
- e) "the Minister" means the Minister of the Environment;
- f) "the Deputy Minister" means the Deputy Minister of the Environment.

### 2. Preamble

The purpose of the TOR is to describe the operational, administrative and reporting relationships between the Minister and the Chair, the Chair and the Deputy Minister, and reflect the powers of the Council as an advisory agency as set out in Schedule C of the 'Agency Establishment and Accountability Directives'.

The TOR should be used in conjunction with the legislation governing the Council and its constituting instrument to determine how the Council should govern itself. This TOR does not affect, modify, limit or interfere with the responsibilities of any of its parties under law. In the event of any conflict between the TOR and any law, the law prevails.

### 3. Duration and Review of Terms of Reference

The TOR will become effective on the date of its signature by the parties and will remain in effect for five years or until a new TOR is agreed to by the parties.

The TOR must be reviewed at the expiry of the term or prior to that at the request of any of the parties involved.

### 4. Legislative Authority

The legislative authority of the Council is set out in Section 4 of the *Safe Drinking Water Act*.

## **5. Mandate**

The mandate of the Council is to provide advice and make recommendations to the Minister of the Environment on matters related to standards for drinking-water quality and testing. Activities of the Council may include but not be limited to:

- a. Review research and scientific and technical documentation related to drinking-water quality and testing standards;
- b. Publish information in the Environmental Registry established under section 5 of the *Environmental Bill of Rights, 1993* and undertake additional consultation with and solicit views from the general public as necessary and provide feedback;
- c. Forward recommendations and their rationale to the Minister within a specified time frame;
- d. When directed by the Minister, provide advice on policies, practices and procedures to be used in the development of standards; and, priorities for the development of standards, testing methods and related research; and
- e. Make recommendations to the Minister on other matters it has identified as being priorities and which merit the attention of the Minister and/or the Ministry.

## **6. Guiding Principles**

The parties agree that they will adhere to the following principles:

- a. The Minister recognizes that the Council is a statutory entity which exercises powers and performs duties in accordance with its mandate under the Act;
- b. The Minister recognizes that the Council operates at “arms length” from the Government;
- c. The Council acknowledges that it is accountable to the Government in exercising its mandate. Accountability is a fundamental principle to be observed in the management, administration and operations of the Council;
- d. As an agency of the Government, the Council conducts itself according to the management principles of the Government of Ontario;
- e. The Deputy Minister will ensure that the support or services provided to the Council are of the same quality and standard as provided to the Ministry’s own line divisions and branches.
- f. The Council and the Ministry must avoid duplication of services.

## **7. Reporting Relationships**

The parties agree that:

- a. The Council is committed through the Chair to the reporting requirements as outlined in Schedule 2 (attached);

- b. The Chair will keep the Minister advised of issues or events that concerns or may concern the Minister in the exercise of his or her responsibilities;
- c. The Minister and the Chair will consult with each other on relevant public communications strategies and publications and will keep each other informed on the results of stakeholder and other public consultations and discussions;
- d. The Chair will provide reports containing the Council's advice on a specified subject and reports commissioned by the Council to the Minister. The public release of said advice or reports shall be at the discretion of the Minister; statements to the press with respect to such advice or reports are not appropriate until the report is publicly released by the Minister; and
- e. The Minister and the Chair will meet as required to discuss issues relating to the delivery of the Council's mandate.

## **8. Accountability**

The accountability of the parties is as follows:

- a. The Minister is accountable to the Legislature for the Council's fulfillment of its mandate, its compliance with Government policies and for reporting to the Legislature on the Council's affairs;
- b. The Chair is accountable to the Minister for the performance of the Council in fulfilling its mandate and for carrying out the roles and responsibilities assigned to the Chair by Management Board of Cabinet Directives and Guidelines, the Council's constituting instrument and the TOR; and
- c. The Deputy Minister is accountable to the Minister for the performance of the Ministry in providing administrative support (including staffing and funding) to the Council and for carrying out the roles and responsibilities assigned to him or her by the Minister, by Management Board of Cabinet Directives and Guidelines, the Council's constituting instrument, and the TOR.

## **9. Roles and Responsibilities**

The *Minister* is responsible for:

- a. Monitoring the activities of the Council to ensure that its mandate is being fulfilled and that it is in compliance with Government policies;
- b. Reviewing, approving and presenting the estimated/recommended annual allocation for the Council as part of the Ministry's Business Plan;
- c. Consulting with the Chair as appropriate when significant new directions for the Council are contemplated or when initiatives are taken to amend any legislation or regulations which may affect the mandate of the Council;
- d. Ensuring that proposed changes to the governing legislation/regulation are accompanied by a recommendation on the continued need for the Council's services and the appropriateness of its mandate;

- e. Recommend appointments and reappointments pursuant to the process for Council appointments established by legislation or by Management Board, after consultation with the Chair as appropriate; and
- f. Meeting with the Chair of the Council as required.

The **Chair** is responsible for:

- a. Directing the affairs of the Council within its mandate as defined by the Act, the Council's constituting instrument and the TOR;
- b. Ensuring that the Council carries out the responsibilities assigned to the Council or its Chair under the Act, the Council's constituting instrument and the TOR;
- c. Providing advice to the Government and seeking policy direction from the Government in specific instances;
- d. Keeping the Minister advised of issues or events that concern or can reasonably be expected to concern him or her in the exercise of ministerial responsibilities;
- e. Ensuring that matters relating to the Council which are of importance to the Ministry are brought to the attention of the Minister and the Deputy Minister in a timely fashion;
- f. Recommending all formal documents related to the fulfillment of the Council's mandate to the Government for approval;
- g. Reviewing the Council's annual budget and bringing it forward to the Minister and the Deputy Minister for approval;
- h. Reviewing the Council's annual report and bringing it forward to the Minister and the Deputy Minister by July 31 of each year;
- i. Ensuring that public funds are used in accordance with management Principles of the Government of Ontario - ensuring that the Council operates within the approved funding in the fulfillment of its mandate;
- j. Attending and/or making presentations before Cabinet or committees of Cabinet or the Legislature on matters concerning the affairs of the Council when requested to do so;
- k. Notifying the Minister of appointment vacancies and making recommendations to the Minister on appointments and reappointments of Council members pursuant to the process for Council appointments established by Management Board of Cabinet;
- l. Ensuring Council compliance with Management Board of Cabinet Directives and Guidelines, and the Ministry's Administrative Policy Manual;
- m. Ensuring that conflict of interest matters are handled in accordance with Management Board Directives; and
- n. Ongoing liaison with the Director of the Ministry's Standards Development Branch to exchange information and ideas related to the administration and operation of the MOE and the Council as they impact upon each other.

The **Deputy Minister** is responsible for:

- a. Advising and assisting the Minister in meeting assigned ministerial responsibility with respect to the Council and ensuring that the Minister is advised of the requirements of Management Board Directive of the administration of agencies;
- b. Undertaking on behalf of the Minister, assessments of whether or not the Council is fulfilling its legislative mandate in concert with approved Government policies; identifying any need for corrective action and recommending ways to resolve any issues that are identified;
- c. Providing a framework for assessing whether the Council is fulfilling its mandate;
- d. Ensuring the ministry is providing the administrative support, financial and other services as set out in the TOR and Schedule 1 (attached) to reflect the same quality and standard as provided to the Ministry's own line divisions and branches;
- e. Meeting with the Chair, as required, to discuss matters of mutual importance to the Council and the Ministry, such as services provided by the Ministry to the Council;
- f. Informing the Council of the policies of the Ministry and the Government that apply to the Council, including financial and administrative, human resources and corporate policies, including policies in respect of French language services, freedom of information, workplace harassment and equal opportunity; and
- g. The Deputy Minister may, in accordance with the *Public Service Act*, and applicable Government directives, delegate any of the powers and duties assigned to him or her by law, as they pertain to the Council.

## 10. Finances

- a. The Council is funded out of the Consolidated Revenue Fund pursuant to an appropriation authorized by the Legislature, unless otherwise provided.
- b. Recovered costs and other revenues, if any, are paid, as received, to the Consolidated Revenue Fund and may not be applied to as administrative expenditures for the Council unless otherwise provided by law.
- c. Financial arrangements are subject to amendment by such revenue policy directives as the Management Board of Cabinet may issue. Financial arrangements may also be changed by amendment to the Council's constituting instrument.
- d. The Council prepares estimates for inclusion in the Business Plan of the Ministry for presentation to the Legislature. The Council will deliver these estimates to the Minister and Deputy Minister in sufficient time to be analyzed and approved by the Minister and Deputy Minister. The estimates provided by the Council may, after appropriate consultation with the Chair, be altered as required.
- e. Financial procedures of the Council must be in accordance with Management Board of Cabinet Directives and Guidelines, the Ministry's Administrative Policy Manual and other directives of the Ministry and Government.

- f. Responsibility for the maintenance of documentation and information to support expenditures is assigned to the Chair as outlined in the Accounting Policy of the Ministry.

## **11. Audit Arrangements**

- a. The affairs of the Council shall be subject to audit by both the Management Audit Branch of the Ministry and by the Provincial Auditor. The Ministry and the Council shall arrange mutually agreeable times for audit by the ministry at least once per annum.
- b. The results of any audit by Ministry staff will be shared with the Chair. The Chair will be accorded an opportunity to enter his or her comments into the audit record.
- c. The Chair shall direct to the Minister through the Ministry all correspondence of the Council with the provincial Auditor in response to the findings, conclusions and recommendations of the Provincial Auditor's report. The Chair shall consult with the Director of the Ministry's Management Audit Branch throughout the audit process.
- d. The Chair may request an external audit of the financial transactions or management controls of the Council at the Council's expense.

## **12. Administrative Arrangements and Support**

- a. The Ministry is committed to providing the Council with the full range of financial and administrative support services either directly or through shared service agreements as outlined in Schedule 1 (attached) to this TOR. The services will be provided to the same quality and standard as provided to the Ministry's own line divisions and branches.
- b. The Council is an advisory agency as designated by the Management Board of Cabinet. The Chair will develop procedures and will operate the Council in accordance with all administrative policies established and specified in Management Board of Cabinet Directives and Guidelines and the Ministry's Administrative Policy Manual.
- c. The Council may engage persons to provide professional, technical or other assistance to or on behalf of the Council, and may provide payment or remuneration and expenses of such persons in accordance with the Government's and the Ministry's policy.
- d. If the Council requires consultant or other services, the following shall be adhered to:
  - i. the Council will use the administrative services of the Ministry in developing, tendering and administering contracts;
  - ii. all tendering will be consistent with the procedures contained within the Management Board of Cabinet Directives and Guidelines and the Ministry's Administrative Policy;

- iii. the Council's signing authority and single/sole authority is in accordance with the Ministry Delegation of Authority Framework;
- iv. in order to avoid the duplication of services already available from the Ministry, all requests from the Council for either internal or external creative services (i.e. Web page design, desktop publishing, advertising) will be forwarded to the Communications Branch for review and approval by the Director; and
- v. to ensure documents are in accordance with government graphic design guidelines the Council should forward any changes in graphic designs or any new documents to Communications Branch for review and approval by the Director.
- e. Legal Services to the Council are to be provided by the Ministry of the Attorney General.
- f. The Council may request outside legal assistance when it requires expertise unavailable within the Ministry of the Attorney General or when the use of a law officer of the Crown would result in any conflict of interest.
- g. The Ministry of the Attorney General must approve retention of outside legal counsel by the Council. The Council will refer to and comply with the Management Board of Cabinet Directives and Guidelines on legal services and the retention of counsel when obtaining external legal counsel.

### **13. Staffing and Appointments**

- a. The Council is staffed by persons appointed under the *Public Service Act* and eligible for all those rights and benefits accorded under the *Public Service Act*, and relevant collective agreements.
- b. All recommendations for new appointments and reappointments to the Council will be reviewed by the Minister's Office and the Public Appointments Secretariat.
- c. The Council in its dealings with staff appointed under the *Public Service Act* is subject to Management Board of Cabinet Directives and Guidelines.
- d. The Council is also governed by:
  - i. the policies of the Civil Service Commission;
  - ii. the human resources manual of the Ministry;
  - iii. the corporate financial and administrative policies and procedures manual;
  - iv. applicable collective agreement provisions; and
  - v. any other applicable legislation or regulations.

### **14. Conflict of Interest**

- a. All members of the Council appointed by the Minister shall abide by the conflict of interest principle and mandatory requirements set out in the Management Board of Cabinet Directives.

## **Appendix G - Website**

The Council's website, found at [www.odwac.gov.on.ca](http://www.odwac.gov.on.ca), became an important source of information for the general public, Ministry of the Environment staff, and members of the Council alike.

The website was developed to provide:

- General information on the Council's activities
- Council Contact information
- Information on Council Members
- Public Minutes from Council meetings
- Drinking Water-related announcements
- Access to reports to the Minister of the Environment
- Annual Reports
- Links to other Drinking Water-related websites
- Status of the Council's work on:
  - Justice O'Connor's Priorities
  - Drinking Water Standards Review
  - Drinking-Water Systems Regulation Review of smaller, private system requirements
  - Wells Regulation Review of chlorination requirements

## **Appendix H - Contact Information**

### **Mailing Address:**

Advisory Council on Drinking Water Quality and Testing Standards  
40 St. Clair Avenue West, 3rd Floor  
Toronto, Ontario, Canada  
M4V 1M2

### **Chair:**

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### **Staff:**

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