

DRAFT

The Walkerton Inquiry

Expert Meeting on:
**Potential Contamination of Drinking Water
and Drinking Water Standards**

Ryerson University
International Conference Centre
240 Jarvis Street
Toronto, ON M5B 2L1

April 23-24, 2001
Coffee from 09:30
Meeting 10:00 to 16:00

Chair: Steve E. Hrudehy

AGENDA

A. Introduction of Participants (all).

B. Review of Process and Conduct of the Meeting (chair).

C. Review of Scope for the Meeting (chair)

1. Sources and pathways of contaminants found in drinking water – the basic phenomena involved in and characteristics of contamination of drinking water, what is known from the environmental and public health sciences and what is relevant to Ontario

2. Risk associated with various contaminants – the scientific evidence on health risks known for relevant contaminants of drinking water, overview / screening level assessment only, of what is known and what is relevant to Ontario

3. Risk assessment and the setting of drinking water quality criteria – the scientific foundations and principles for risk assessment in terms of what they are supposed to, and are capable of achieving, what are the limitations and weaknesses of the basic scientific inputs and processes, what is known and what could be useful for setting drinking water quality criteria applicable to Ontario, what has been, is currently or could be done with risk assessment for Ontario and Canada in setting drinking water criteria.

A number of other related expert meetings will address similar and closely related issues. In the case of the issues with the greatest similarity and greatest potential for overlap, the subsequent expert meetings will be focusing more on specific experience related to what has or is likely to happen in Ontario.

The upcoming meetings covering related topics include:

- *Protection of Drinking Water Sources (May 3, 4)*
- *Treatment, Distribution and Monitoring of Drinking Water (May 9, 10)*
- *Government Responsibility for Drinking Water (May 16, 17)*
- *Provincial Regulation of Drinking Water Safety: I (May 22-24), II (May 31-June 1)*
- *Public Involvement in Drinking Water Safety (June 5, 6)*
- *Drinking Water Providers in Ontario (June 13-15)*

To avoid unnecessary duplication with these upcoming meetings, this meeting will focus primarily on the state of scientific knowledge on issues relevant to Ontario, RATHER THAN the specifics of any particular contamination scenario or circumstance in Ontario. Likewise the specific legal form of drinking water quality criteria (objectives, guidelines, standards or regulations) will be deferred to the expert meetings on Provincial Regulation of Drinking Water Safety and Public Involvement in Drinking Water Safety.

Where important themes that logically belong in subsequent meetings are raised during this meeting, they will be appropriately noted and referred to the agenda for the subsequent meetings.

Discussion of Substantive Issues:

D. Sources of Microbial Pathogens – Human Waste.

- What waterborne pathogens arise in human wastes and are relevant to Ontario drinking water?
- What is currently known about their loading to and survival in current or potential drinking water sources?
- Can pathogens be grouped in terms of occurrence and survival to allow effective surrogates to be identified?
- How effective is pathogen control at source (waste disinfection)?

E. Sources of Microbial Pathogens – Agricultural Waste and Wildlife.

- Same questions as above, but are there any pathogens unique to non-human sources?
- What is known about the comparative scale of pathogen contamination from these sources compared to human wastes (elsewhere and in Ontario)?
- What means can be effective at source?

F. Sources of Chemical Contaminants – Point Sources.

- Are there points sources of chemical contaminants that are likely to be relevant to Ontario?
- What chemical contaminants are important to human health? Which appear to be clear health priorities?
- What is known about the scale and scope of health risk that they may pose in Ontario?
- What are the prospects for improving or refining our state of knowledge on these issues for Ontario?

G. Sources of Chemical Contaminants – Non-Point Sources.

- Are there non-points sources of chemical contaminants that are likely to be relevant to Ontario?
- What chemical contaminants are important to human health? Which appear to be clear health priorities?
- What is known about the scale and scope of health risk that they may pose in Ontario?
- What are the prospects for improving or refining our state of knowledge on these issues for Ontario?

H. Drinking Water Criteria – Objectives, Guidelines, Standards, Regulations.

The specific form and implementation of controls will be dealt with in the expert meetings on Provincial Regulation of Drinking Water Safety (May 22-24, May 31-June 1).

- What risk assessment procedures and protocols are in use elsewhere, in Canada and Ontario that are used to set drinking water quality criteria?
- What are the conceptual strengths and weaknesses of various risk assessment approaches?

I. Setting Drinking Water Criteria –Processes and Participation.

The discussions on public involvement will be focused on the explicit outcomes that are desirable from public involvement because the entire subject of public involvement in drinking water safety will be addressed in the June 5/6 meeting.

- What processes should be followed for setting drinking water criteria?
- What are the needs and role for:
 - research to improve evidentiary foundations,
 - explicit public and other stakeholder involvement in criteria-setting,
 - academic participation and peer review,
 - ongoing review and updating.
- What is the most effective role for the federal/provincial/territorial process (Canadian Drinking Water Guidelines) relative to Ontario's needs? (*This will be dealt with at the conceptual level of scientific input because the jurisdictional issues will be dealt with at the May 16-17 meeting.*)

J. Other Critical Issues Regarding Our Knowledge Foundations on Drinking Water Health Risk.

The agenda for this meeting is very full, but time will be protected to assure that any basic issues regarding our foundations of knowledge for drinking water quality criteria and health risk can be raised and noted for follow-up as necessary.