

102

**Publication# 102**  
**ISBN#978-1-77189-627-6**

WATER FIT TO DRINK?

THE NEED FOR A SAFE DRINKING WATER ACT IN CANADA

Presented to the NDP Environment Task Force  
on behalf of the Canadian Environmental Law  
Association and Pollution Probe

BY

Toby Vigod  
Canadian Environmental  
Law Association  
8 York Street, 5th Floor S.  
Toronto M5J 1R2  
(366-9717)

Anne Wordsworth  
Pollution Probe  
12 Madison Avenue  
Toronto M5R 2S1  
(978-4171)

February 1982

Canadian Environmental Law Association

VF:  
CANADIAN ENVIRONMENTAL LAW  
ASSOCIATION.  
POLLUTION PROBE.  
CELA BRIEF NO.102; Wate...RN3257

## TABLE OF CONTENTS

<u>Part</u>		<u>Page</u>
I.	Introduction: Why a Safe Drinking Water Act?	1.
II.	The Present Legal Framework: Whose Responsibility is it?	5.
	A. Constitutional Aspects	5.
	B. Federal and Provincial Legislation	6.
	1. Canada	6.
	(a) Fisheries Act	6.
	(b) The Canada Water Act	6.
	(c) The Canada Shipping Act	7.
	(d) Federal Guidelines for Canadian Drinking Water Quality 1978	7.
	2. Ontario	9.
	(a) The Ontario Water Resources Act	9.
	(b) The Environmental Protection Act	10.
	(c) "The Blue Book": Water Management - MOE goals, policies, objectives and implementation procedures, November 1978	11.
	(d) Objectives for the Control of Industrial Wastes Discharge in Ontario, 1976	11.
III.	The Proposed Safe Drinking Water Act	13.
	A. Constitutional Considerations	13.
	B. Principles for a Safe Drinking Water Act	14.
	1. Overview	14.
	2. Detailed Provisions	15.
IV.	Conclusions and Recommendations	21.
V.	Notes	22.

## I. INTRODUCTION: WHY A SAFE DRINKING WATER

We can no longer assume that drinking water is as pure and unadulterated as it once was.

Since the Second World War, North America has witnessed the unprecedented development and proliferation of synthetic chemicals.<sup>1</sup> The careless use, waste and disposal of these chemicals has resulted in the contamination of our water supplies to varying degrees. The same waterways which are used for the discharge of industrial wastes are also used to supply communities with water for drinking.

Surface water supplies collect contaminants from direct discharges, agricultural and urban run-off and airborne fallout. Even ground-water supplies, which were believed to be better protected, have been affected by spills, improper waste disposal practices and the infiltration of chemicals such as de-icing salts through the soils.<sup>2</sup> As a result, trace amounts of many undesirable chemicals are now being detected in drinking water samples all across Canada.

Furthermore, the technology which was designed to purify water has not kept pace with industrial development. No methods of treatment are currently in place that would specifically minimize or eliminate chemical contaminants, particularly synthetic organics.

The principle method of treatment, chlorination, has served us in the suppression of disease-carrying bacteria. However, chlorine, when it is added to the water supply, combines with naturally-occurring substances already in the water to produce another class of hazardous compounds known as trihalomethanes.<sup>3</sup>

The scope of the problem is not identical in every community across Canada. The degree of contamination varies from region to region and from community to community. For example, the town of Niagara-on-the-Lake takes its water directly from the highly contaminated Niagara River. Numerous synthetic organic chemicals are measurable

in the drinking water, chemicals that reflect the industrial wastes discharged by the major chemical companies upstream at Niagara Falls, New York.<sup>4</sup>

Another example of a community whose water supply has been jeopardized by chemical contamination is the city of Regina. The city's aquifer is threatened by the migration of polychlorinated biphenyls (PCBs) through the soil from a ruptured pipeline linking a PCB storage tank with the Federal Pioneer Electric Plant just north of downtown Regina.<sup>5</sup>

The plethora of problems plaguing drinking water supplies is not likely to be resolved in the near future.

First, although government and industry alike have espoused a philosophy of pollution control and abatement, the lack of effective regulation and enforcement of existing legislation governing the manufacture and disposal of contaminants has left the public vulnerable to the growing threat of toxic chemicals in the environment.

Secondly, in the last decade despite increased public awareness and concern for water pollution, no substantial progress has been made in stemming the tide of toxic chemicals flowing into waterways such as the Great Lakes.

And thirdly, despite unilateral action that can be taken by Canadian authorities to clean up one side of shared Canada-United States waterways, Canadian government officials do not have the influence or the desire to intervene in U.S. courts to force American companies to curtail polluting activities.

The failure to control the proliferation of toxic chemicals has resulted in the intrusion of these substances into our drinking water. Their presence poses a serious potential health threat to the consumer. Although their impact may not be easily identified, they contribute to the growing incidence of cancer and other chronic diseases in North America.<sup>6</sup>

We believe that the priority of responsible governments should be to initiate an aggressive campaign to clean up the sources of these chemicals. However, since water quality has continued to deteriorate in many parts of the country during the same period in which serious attention has been given to the problem, we believe that the public right to safe drinking water must be guaranteed by legislation.

In this report, we review the present legal structure at the federal and provincial levels, using Ontario as an example, and the limitations of this structure with respect to safeguarding drinking water quality. This review demonstrates that although legislation has been enacted to control water pollution at the source, this legislation has not been effective in preventing the continued degradation of our waterways. Furthermore, there has been no legislation enacted that would ensure the quality of drinking water at the point of consumption.

Therefore, we propose that a Safe Drinking Water Act be passed in order to safeguard public health and to set limits of exposure to chemical contaminants in drinking water. One of the purposes of this Act is to promote research into improved methods of water treatment that would eliminate organic chemicals in the treatment processes. This research would result in the development and incorporation of improved technologies into our present treatment systems.

The principles and provisions that should be incorporated into such an Act are discussed in detail in Section III.

The major features that we propose for this legislation are regulations setting legally enforceable standards for health-related parameters in all public and private drinking water supplies, a public notification procedure that would go into effect when a regulation is violated and finally, the right of the individual to sue the water supplier or polluter or to seek judicial review of the federal Department of the Environment or the provincial Ministry of the Environment for the failure to perform any duties under the Statute.

We feel that these provisions are essential to a meaningful Safe Drinking Water Act. Since the problems affecting drinking water supplies are nation-wide, we recommend that they be incorporated into federal legislation that would guarantee an equal degree of protection for all Canadians. We would also recommend that the provisions of the federal Act then be adopted under supplemental provincial legislation to be administered by provincial environmental authorities.

## II. THE PRESENT LEGAL FRAMEWORK: WHOSE RESPONSIBILITY IS IT?

In this section we review constitutional aspects as well as existing federal and provincial (Ontario) legislation and guidelines applicable to water quality and water pollution. This review examines the most important statutes that relate to the protection of water quality and that apply, directly or indirectly, to drinking water quality.<sup>6a</sup> Although this legislation is intended to control water pollution, it is clear that there are significant factors that have limited the effectiveness of this legislation.

First, governments have not taken advantage of their powers under these Acts to control pollution effectively. Enforcement has been sporadic and uneven. Secondly, non-point source pollution such as agricultural runoff which affects drinking water cannot be easily controlled by legislation. For example, pesticides such as atrazine commonly used on corn crops have been detected in drinking water supplies in different parts of the province.

Finally, even where existing legislation provides a framework for establishing regulations, the government has not used these provisions to enact standards. This has meant with respect to drinking water that there is no legislation regulating contaminants at the point of consumption.

Therefore, we feel that existing legislation has not provided adequate protection for drinking water supplies and that there is a need for a legally enforceable framework to ensure that drinking water is protected at the point of consumption.

### A. Constitutional Aspects

The British North America Act, which reflected the problems and concerns of 1867 when it was enacted, did not allocate legislative authority on environmental matters to either the federal government or to the provinces. As a result of the division of powers, the federal and provincial governments have overlapping jurisdictions over water resources.<sup>7</sup> Without clear responsibility for environmental concerns both levels of government have been able to disclaim authority for

managing environmental problems by alleging that it is within the other government's jurisdiction.

## B. Federal and Provincial Legislation

Existing water quality legislation at both the federal and provincial levels is primarily directed at regulating water quality at the point of pollution, not at the point of consumption. This legislation is aimed at reducing the discharge of contaminants generally and at prohibiting polluting activities at their source, but there is no legislation, either provincial or federal, that specifically regulates water quality at the tap.

### 1. CANADA

The primary federal legislation dealing with water pollution are the Fisheries Act<sup>8</sup> the Canada Shipping Act<sup>9</sup> and the Canada Water Act.<sup>10</sup> None of these statutes directly address drinking water quality or set standards for its protection. Only non-enforceable guidelines, discussed in section (d), exist for protecting drinking water.

#### (a) FISHERIES ACT

The purpose of the Fisheries Act is to protect and conserve fisheries under the jurisdiction of the Government of Canada. The Act forbids any person to deposit or permit the deposit of a deleterious substance into water frequented by fish.<sup>11</sup> Regulations may be made under the Act, naming deleterious substances that may be deposited without breaking the law. However, although this Act confers broad powers on the federal government, its implementation has been left largely to the provinces. In practice this has meant in Ontario that this important Act has only been used once by the provincial government.

#### (b) THE CANADA WATER ACT

The purpose of this act is to regulate water on a national scale, through cooperation with provincial governments. The Act empowers the federal government to make agreements with the provinces to provide for comprehensive water resources management projects related to any waters in which there is a significant national interest.<sup>12</sup>



Once a region has been designated as a water quality management area, the deposit of waste of any type in its waters or in any place where waste may ultimately enter those waters becomes an offence.<sup>13</sup>

Also under the Act, federal agencies could set up to manage a basin located entirely within a province. Unfortunately, at least in Ontario, no water quality management areas or agencies have ever been established under the legislation.

The only part of the Act that is capable of direct enforcement is Part III, and the regulations passed pursuant to this Part, which deal with phosphorus concentration control.<sup>14</sup>

(c) THE CANADA SHIPPING ACT

This Act deals primarily with the control of water pollution from ships in Canadian waters. It is administered by the Department of Transport. Under this Act the Cabinet can make regulations dealing with many aspects of marine activity that could give rise to pollution.<sup>15</sup> While this Act is limited to water pollution from ships it has an important application in protecting drinking water supplies from marine accidents or spills.

(d) FEDERAL GUIDELINES FOR CANADIAN DRINKING WATER QUALITY 1978

There is no federal legislation that specifically addresses drinking water quality. Instead non-enforceable guidelines were developed by the Federal-Provincial Working Group on Drinking Water, and the most recent guidelines were established by Health and Welfare Canada in 1978.

These guidelines recognize that "water for drinking, culinary and other domestic uses should be safe, palatable and aesthetically appealing".<sup>16</sup> They also acknowledge that "water should be free from pathogenic organisms, hazardous chemical and radioactive substances, and objectionable colour, odour and taste".<sup>17</sup> However, the actual ~~scope of the guidelines in no way accomplishes such admirable goals.~~

The guidelines are limited to only 42 substances, while the number of pollutants in water identified by the International Joint Commission as having potentially adverse health effects has been set at 381 chemicals.<sup>18</sup> Also, in evaluating the toxicity of each parameter, the synergistic effects of chemicals combining in the water supply is not taken into account.

These federal guidelines are oriented primarily to the identification of biological and physical problems in the drinking water, such as taste and odour or bacteriological problems. Not all of these guidelines are intended to protect human health. For example, a guideline of .3 mg./litre (parts per million) is set for iron which may give an objectionable colour and taste to the water when it is present in high concentrations, but does not have serious health implications.

In fact, the guidelines are noticeably lacking in suggested limits for organic chemicals. The only organic chemicals for which guidelines have been established are nitrotoluenic acid (NTA - a substitute for phosphates in laundry detergents), a limited number of pesticides and trihalomethanes.<sup>19</sup> No guideline has been established for benzene, which is a known carcinogen and a common contaminant in polluted water supplies. Also, in tests done on drinking water from Niagara-on-the-lake, the majority of organics, including benzene, found in drinking water samples are not covered by the drinking water guidelines.

While the "judicious use of these guidelines" is intended to provide safe drinking water to Canadians, these guidelines are not legally enforceable standards. This means that no one has a legal right to bring an action based on a violation of the maximum allowable levels contained in the guidelines.

Also, while a violation of a guideline supposedly constitutes grounds for the rejection of the water supply, this provision is meaningless when there is no legal right of action. Furthermore, there is no onus on the water supplier to notify the public when a guideline has been violated, and, in the case of a violation, there is no clear instruction as to the course of action that should be followed by the water supplier in carrying out his responsibilities to the public, other than resampling of the water.

We propose that, at a minimum, the limits set in the guidelines which refer to substances with adverse effects on human health should be adopted as regulations to the proposed Safe Drinking Water Act. It is also necessary, however, to set limits for additional parameters such as benzene that are not presently addressed in the guidelines but which represent significant health risks.

## 2. ONTARIO

In Ontario two statutes have been enacted that could be used effectively to control water pollution. These two Acts are the Ontario Water Resources Act (OWRA)<sup>20</sup>, and the Environmental Protection Act (EPA)<sup>21</sup>. The most important statute governing water quality is the Ontario Water Resources Act. However, rather than using this Act to establish legally-enforceable standards for either drinking water or industrial waste discharges, the Ministry of the Environment relies on non-enforceable guidelines outlined in "The Blue Book".

### (a) THE ONTARIO WATER RESOURCES ACT

The primary provincial law governing the use and quality in Ontario is the Ontario Water Resources Act (OWRA). The purpose of this Act is to preserve the purity and prevent the pollution of natural waters.<sup>22</sup> Under this Act, the Minister of the Environment is given supervision of all surface and groundwaters in the province.<sup>23</sup> He may examine all waters from time to time to determine whether a polluted condition exists and the causes of that condition.<sup>24</sup>

It is an offence for a municipality or person to discharge or deposit, or cause or permit the discharge or deposit of, polluting material into or in any place that may impair water quality.<sup>25</sup> However, impairment is a relative concept. The potential effectiveness of this Act is limited by the fact that there are no specific, legally defined limits that automatically constitute an offence.

The Minister has wide regulation making power as outlined in section 44 of the OWRA. Specifically, under s.44(1)(h) the Minister may make regulations "specifying standards of quality for potable and other water supplies, sewage and industrial waste effluents, receiving streams and water courses". Again, no such enforceable regulations have ever been promulgated. There are only unenforceable water management goals, policies, objectives and implementation procedures of the MOE which are discussed in section (c).

While section 44(1)(h) of the OWRA does provide for the enactment of safe drinking water regulations, the framework that we are proposing for the development of these regulations and additional protective provisions would require significant amendments to the Act. Therefore, it is our recommendation that these provisions should be placed in separate provincial legislation, an Ontario Safe Drinking Water Act, that would complement a federal Safe Drinking Water Act.

(b) THE ENVIRONMENTAL PROTECTION ACT

The purpose of this Act is to provide for the protection and conservation of the natural environment.<sup>26</sup> "Natural environment" is defined to include the air, land, and water of Ontario.<sup>27</sup> "Water" is defined to mean surface and/or ground water.<sup>28</sup>

The main offence provision of the EPA,<sup>29</sup> which prohibits the discharge of contaminants into the natural environment, is applicable to contaminants deposited in water.

However, as in the case of the OWRA, there are no specific legally defined units that automatically constitute an offence for the impairment of water quality. Other provisions which may effect water quality include those regulating sewage systems in rural areas of the province (Part VII), waste and Deep Well Disposal.<sup>30</sup>

(c) "THE BLUE BOOK": WATER MANAGEMENT - MOE GOALS, POLICIES, OBJECTIVES AND IMPLEMENTATION PROCEDURES, NOVEMBER 1978

The "Blue Book" outlines the Ministry of the Environment's (MOE) Water Management Program.<sup>31</sup> The goal of the Surface Water Quality Management Program is to ensure that Ontario's surface waters are of a quality which is satisfactory to aquatic life and recreation.<sup>32</sup> According to the MOE, water which meets the Water Quality Criteria for aquatic life and recreation (set out as Table 1 - Provincial Water Quality Objectives), will be suitable for most other beneficial uses such as drinking water and agriculture.

Drinking Water Quality Criteria are set out in Table 4 of the Blue Book. This Table was extracted from the MOE publication "Drinking Water Objectives" published in February, 1978.

These objectives maintain that domestic water supplies "must be free from chemical substances and micro-organisms that would constitute a health hazard".

Although the limits for certain substances follow the federal drinking water guidelines, the provincial objectives are even less comprehensive. Unenforceable limits are set for less than 30 substances. As with the federal guidelines, many chemical parameters, especially organics (including known carcinogens), in common industrial use are not covered in the drinking water objectives.

(d) OBJECTIVES FOR THE CONTROL OF INDUSTRIAL WASTES DISCHARGE IN ONTARIO, 1976

These non-enforceable objectives state that the Ministry of the Environment may require industries who discharge effluent into water bodies to limit, remove, or modify certain constituents in the effluent. Desirable concentrations of contaminants, such as BOD, suspended solids, heavy metals, oils, and grease and toxic substances are listed. For example, while mercury and cadmium are permitted at very low concentrations, toxic substances<sup>33</sup> must be eliminated or destroyed.

Because these are non-enforceable objectives, the Ministry can deal with each industry on an individual basis. This has created a situation where many major polluters are discharging in violation of the Ministry's objectives. For example, of 16 Canadian companies whose discharges end up in the Niagara River, eleven of these companies were discharging wastes that were not in compliance with the Ministry's objectives.<sup>34</sup> In fact, four of these companies had discharges at least ten times in excess of the Ministry's objectives on one or more of the parameters measured, according to a report issued in 1978.<sup>35</sup>

## III. THE PROPOSED SAFE DRINKING WATER ACT

## A. CONSTITUTIONAL CONSIDERATIONS

As noted in Section II(a), there is overlapping jurisdiction between the federal government and the provinces in regard to legislative authority for water pollution and water quality management.

However, we submit that the federal government should have a statutory role in the protection of drinking water. The federal government's jurisdiction to enact a Safe Drinking Water Act would be derived primarily from its criminal law power and the general power of peace, order, and good government conferred under the BNA Act. The criminal law power has been held to encompass the preservation of "public peace, order, security, health, and morality".<sup>36</sup> Clearly, in this case, the protection of drinking water quality has a direct impact on public health.

Furthermore, the peace, order, and good government residual power which has been judicially broadened to include matters of a "national dimension" can also be used to justify a federal Safe Drinking Water Act. The contamination of our drinking water supplies is a matter of grave national concern and goes beyond "local or provincial concerns or interest".<sup>37</sup> It would seem clear that these heads of federal legislative power, used to justify the enactment of the Environmental Contaminants Act can also be applied to justify a federal Safe Drinking Water Act.

The provinces could also justify enactment of a Safe Drinking Water Act, under the numerous heads of legislative power derived from the BNA Act. These include the province's jurisdiction to legislate in regard to property and civil rights, local works and undertakings, and matters of a local or private nature.<sup>38</sup> The provincial Safe Drinking Water Act would contain substantially the same principles and provisions of the federal legislation but could contain more stringent regulations for chemical parameters.

## B. PRINCIPLES FOR A SAFE DRINKING WATER ACT

## 1. OVERVIEW

The following are the principles and general provisions that should be found in federal and provincial Safe Drinking Water Acts. The U.S. Safe Drinking Water Act, 1974,<sup>39</sup> has been examined in the development of the principles we feel should be incorporated into Canadian legislation. However, a number of the provisions and procedures contained in the U.S. Act are not applicable in the Canadian context and have not been adopted.

A Canadian Safe Drinking Water Act will require the Department of the Environment to establish regulations limiting the amounts of certain contaminants in drinking water. These regulations will be enacted within a certain time frame during which the public will have an opportunity for input into the regulation-making process.

There will be two different sets of water quality regulations that will be enacted. Primary drinking water regulations will set maximum contaminant levels for substances that may have adverse effects on human health. Secondary regulations will deal with substances that may cause problems with the odour, appearance, or usability of drinking water.

These two sets of regulations will apply to both public and private drinking water supplies, whether the source is surface water or ground water. Enforcement procedures and monitoring requirements will vary depending on whether it is a public or private drinking source. A public water system could be defined as one that provides piped water for human consumption and that has at least 15 service connections or regularly serves at least 25 individuals.<sup>40</sup>

The provinces will have the main responsibility for enforcing the drinking water standards once they have passed their own Safe Drinking Water Acts, adopting regulations at least as stringent as the federal one.



The Act will also require the public water supplier to periodically sample and test the drinking water. Other provisions will require record keeping and access to this information by the public.

Citizens will be given standing to bring civil actions against anyone for damage arising from a breach of the regulations. As well, standing for judicial review should be provided for any failure of the Minister of the Environment to enforce the non-discretionary sections of the Act or for any action taken under the Act. A citizen, of course, will have the usual right to launch a private prosecution for alleged offences committed under the Act.

Other provisions would include: mandatory research into certain key water quality problems; federal-provincial cost sharing arrangements for the enforcement of the Act; and an important public notification section which requires public water suppliers to notify their customers and the public when their water system is not performing adequately, and to provide an alternative supply when necessary.

## 2. DETAILED PROVISIONS

The following sections will outline in more detail the principles which should be incorporated into the federal and provincial Safe Drinking Water Acts.

### (a) PURPOSE SECTION

The Act should state that its purpose is the protection and enhancement of drinking water quality in all areas of Canada.

### (b) DEFINITION SECTION

The Act should provide for the definition of relevant terminology used throughout the remainder of the Act. 'Primary drinking water regulations', 'secondary drinking water regulations', 'Public water system', 'maximum contaminant level', 'contaminant', etc. The most important definitions are listed below:

(i) Primary Drinking Water Regulations

These regulations should specify maximum contaminant levels of certain substances allowed in drinking water which may have adverse effects on human health.

(ii) Secondary Drinking Water Regulations

These regulations should include standards for substances that cause problems with the odour, appearance, or usability of drinking water.

(iii) Public Water System

A public water system could be defined as one that provides piped water for human consumption and that has at least 15 service connections or regularly serves at least 25 individuals.

(iv) Maximum Contaminant Levels

These should be the maximum permissible levels set for contaminants in drinking water.

(v) Contaminants

These should include any physical, chemical, biological, or radiological substance or matter in water.

(c) PUBLIC NOTIFICATION

The purpose of notification is to educate the public as to the extent to which public water systems are performing adequately. Notification must be given by public water system operators when:

- there is a violation of an applicable maximum contaminant level (MCL) under the national primary drinking water regulations;
- there is failure to perform any required monitoring.

Notification of any violation should be published in local newspapers and advertised in other appropriate media as well as included in customers' water bills. There should be a section providing for a fine for failure to comply with the notice requirements under the Act. There should also be a requirement to provide an alternate water supply where necessary.

(d) THE REGULATION MAKING PROCESS

The federal Safe Drinking Water Act should provide for public participation into the regulation-making process. While statutory opportunities for public input into environmental regulation making are limited, there has been some sporadic movement to greater public input.<sup>41</sup>

The federal Safe Drinking Water Act should make it mandatory that the Minister of the Environment publish draft national primary drinking water regulations in the Canada Gazette by a specified date (i.e. 180 days) after the coming into force of the Act. There should then be a period of 90 days for public comment on the adequacy of the proposed regulations. During this 90 day period, any person should be allowed to file a Notice of Objection and require a hearing on one or more of the draft regulations. The hearing should be before a Board of Review to be provided for under the Act.<sup>42</sup>

Finally, there should be a provision that the final regulations should take effect within a specific period of time after the coming into force of the Act. (e.g. 15 months)

The federal Safe Drinking Water Act should provide for secondary drinking water regulations to be published in draft form within 240 days after the coming into force of the Act. There should be a 90 day period for written public comment on these draft regulations and a further amount of time before which the final regulations are to be promulgated.

There should be a provision that both sets of regulations can be amended from time to time to add new parameters or to change existing standards. The amended regulations should also be required to be published in draft form in the Canada Gazette with the same provisions applying for public comment and final promulgation as the initial set of regulations.

The provincial Acts should provide for the adoption of regulations at least as stringent as the federal regulations. If a province wishes to adopt more stringent, or additional drinking water regulations, a similar notice, comment, and hearing process to the federal Act should be provided for.

(e) FEDERAL-PROVINCIAL COST-SHARING ARRANGEMENTS AND ENFORCEMENT

The federal Act should provide that a Province will have primary responsibility for enforcing the primary and secondary drinking water regulations as soon as it enacts legislation incorporating regulations at least as stringent as the federal regulations. At such time, the Federal government shall enter into a financial cost-sharing arrangement with the province to provide for enforcement capability.

(f) RECORD KEEPING - ACCESS TO INFORMATION

The federal and provincial Acts should provide that the public suppliers of drinking water should establish and maintain records, conduct ongoing monitoring programs of their drinking water sources and provide comprehensive information to the Minister of the Environment and the public as required under the Act.

(g) RESEARCH

The Safe Drinking Water Acts should include provisions which enable the Minister of the Environment to conduct research into the causes, diagnosis, treatment, control and prevention of diseases resulting directly or indirectly from contaminants in drinking water. The Act

should also provide for specific mandatory studies. For example, there should be a mandatory study to document the quality, quantity, and availability of rural water supplies. Another study should include research into the sources of surface and ground water contamination.

The Safe Drinking Water Act should also include provisions which mandate the Department/Ministry of the Environment to conduct research into methods of treating drinking water that would reduce or eliminate the presence of organic chemicals from the finished water.

(h) PRIVATE V. PUBLIC WATER SYSTEMS (OFFENCES)

While both the primary and secondary drinking water regulations would apply to both public and private drinking water supplies; due to the economic unfeasibility of a duty to monitor individual wells, the monitoring and notification sections would only apply to public water systems. However, there should be a general provision establishing an offence and penalty for anyone who contaminates a private drinking water supply. Public suppliers would also be subject to fines for violation of the drinking water regulations. Finally, there should be a mandatory provision requiring the Department/Ministry of the Environment to test for the parameters listed in the regulations at the request of any person obtaining water from a private well.

(i) CITIZENS SUITS AND JUDICIAL REVIEW

Both the federal and provincial Safe Drinking Water Acts should provide for 'any person' to have standing to commence civil action against any party for damages caused by a breach of the Act. There could be a requirement that the plaintiff give notice to the alleged violator prior to the launching of the civil action. The Act should also allow for judicial review of any action taken under the Act and provide standing for any person to bring an application for judicial review against the Minister of the Environment, where he has failed to perform a non-discretionary duty prescribed by the Act.

(j) NATIONAL DRINKING WATER ADVISORY COUNCIL

The federal Act should provide for a National Drinking Water Advisory Council to advise the Minister of the Environment on matters relating to his responsibility under the Act. The Council (approximately 15 members) should be appointed by the Cabinet for a term of office. The appointees should be non-governmental individuals with a concern and interest in protecting water quality. For example, this Council would identify public concerns, suggest areas of research, and oversee administration of the Act.

## IV. CONCLUSIONS AND RECOMMENDATIONS

CELA and Pollution Probe contend that we can no longer accept, as a given fact, that our drinking water is safe. There have been too many examples, across Canada, of water supplies endangered by the careless use and disposal of toxic chemicals. While clean-up at the source should be a top priority for government, we cannot ignore the fact that toxic chemicals are finding their way into our drinking water supplies.

We believe that a Safe Drinking Water Act for Canada and the Provinces is long overdue. There is a need for the implementation of drinking water standards, which can be legally enforced by the public as well as a notification system to go into effect when a regulation is violated; a monitoring requirement for public water suppliers; mandatory research into water quality problems; and the right of the citizen to bring an action against any party for damages caused by a breach of the Act.

We are therefore recommending that both levels of government accept the principles for a proposed Safe Drinking Water Act set forth herein and take the lead in ensuring safe drinking water at the tap.

## V. NOTES

1. Ross H. Hall and Donald A. Chant, Ecotoxicity: Responsibilities and Opportunities, Canadian Environmental Advisory Council, Report No. 8, August 1979, Ottawa, Ontario.
2. U.S. Environmental Protection Agency, Groundwater Protection, Water Planning Division, Office of Solid Waste, November 1980, Washington, D.C.
3. Federal Register, Environmental Protection Agency, National Interim Primary Drinking Water Regulations: Control of Trihalomethanes in Drinking Water, November 1979, Washington, D.C.
4. Canada-Ontario Review Board, Environmental Baseline Report of the Niagara River, November 1981 Update, November 1981, Toronto, Ontario.
5. Nature Canada, PCB Spill Haunts Officials, July/September 1979, Ottawa, Ontario.
6. Council on Environmental Quality, Drinking Water and Cancer: Review of Recent Findings and Assessment of Risks, December 1980, Washington, D.C.
- 6a. While other statutes such as the Pest Control Products Act, R.S.C. 1970, c.P-10 as amended and the Environmental Contaminants Act, S.C. 1974-75-76, deal with the regulation of chemicals in the environment, they are substance and product oriented and not media (i.e. air and water) oriented and will therefore not be dealt with in this paper.
7. Federal jurisdiction over water pollution is derived primarily from its powers to legislate in the areas of navigation and shipping (BNA Act, 1867, s.91(10)), sea coast and inland fisheries (s.91(12)); the criminal law (s.91(27)); Indians and lands reserved for the Indians (s.91(24)) and the general power to make laws for the peace, order and good government of Canada.

Canada also has ownership and management responsibilities in respect to federal lands, which include the northern Territories national parks, and certain other property listed in section 108.

Provincial jurisdiction in regard to water pollution and water quality matters is derived primarily from authority to legislate in regard to property and civil rights in the province (s.92(13)); local works and undertakings other than those placed under federal control (s.92(10)); and generally, all matters of a merely local or private nature in the province (s.92(16)). Section 109 of the BNA Act also establishes the province's ownership rights to lands and other natural resources within their boundaries.



8. R.S.C. 1970, c.F-14 as amended
9. R.S.C. 1970, c.5-9 as amended
10. R.S.C. 1970, c.5 (1st Supp.) as amended
11. Supra note 8, s.33(2)
12. Supra note 10, s.4
13. Ibid. s.8
14. See The Phosphorous Concentration Control Regulations. GRC 393. These regulations have been effective in controlling algal growth by limiting the phosphorous content in laundry detergent.
15. Supra note 9, s.728(1)(M)
16. Health and Welfare Canada. Federal Guidelines for Canadian Drinking Water Quality, 1978, at page 15
17. Ibid. p.15
18. International Joint Commission, Great Lakes Water Quality Board Report, Appendix E, Status Report on Organic and Heavy Metal Contaminants in Lakes Erie, Michigan, Huron, and Superior Basin, July 1978, Windsor, Ontario.
19. Supra note 16, at page 52
20. R.S.O. 1980, c.316 as amended
21. R.S.O. 1980, c.141 as amended
22. R. v. Sheridan, [1972] 2 O.R. 192
23. Supra note 20, s.15(1)
24. Ibid. s.15(2)
25. Ibid. s.16(1). This prohibition section does not apply to discharges from sewage works that have been constructed and are operated in accordance with an approval from the Minister. (See s.16(5))
26. Supra note 21, s.2
27. Ibid. s.(1)(1)(k)
28. Ibid. s.(1)(1)(q)

29. Ibid. s.13
30. The Deep Well Disposal Regulations (R.R.O. 1980, Reg. 303) set out standards for the location, maintenance, and operation of a deep well disposal site. For example, section 8 provides that "a monitoring program shall be required at the site for the protection of well water supplies".
31. The MOE Water Management Program includes the following four components: surface water quality management; surface water quantity management; ground water quality management; and ground water quantity management.
32. Ontario Ministry of the Environment. Water Management - Goals, Policies, Objectives and Implementation Procedures. November 1978 at page 4.
33. Toxic substances are defined as materials or waste components that are toxic to aquatic life or render the water unsuitable for potable or recreational uses.
34. Fikret Berkes, Niagara Waterlog, Institute of Urban and Environmental Studies, Brock University, September 1979, St. Catharines, Ontario.
35. Ibid.
36. See Reference Re Validity of Section 5(a) of Dairy Industry Act, [1949] S.C.R. 1 at page 50.
37. See. A.G. Ont. v. Can. Temperance Fed., [1946] A.C. 193 at 205.
38. Supra note 7.
39. 42 U.S.C. 300f et seq.
40. Ibid. s.300f (4)
41. See, for example, the Clean Air Act, s.c. 1970-71-72, c.47, which requires prior publication of emission standards in the Canada Gazette 60 days before promulgation; the Environmental Contaminants Act, S.C. 1974-75-76, ch. 72., which contains a similar public notice provision as well as an opportunity for interested persons to file a Notice of Objection and require a hearing by a Board of Review and the Ontario Occupational Health and Safety Act, 1972, S.O. 1978, ch. 83, which provides even greater public input into the regulation making process. See generally Castrilli, J.F. "Environmental Regulation-Making In Canada" in Environmental Rights In Canada, ed. Swaigen, CELRF, Butterworths, 1981.
42. The precedent for the general principle of the establishment of ~~a Board of Review to hear objections filed in regard to proposed~~ environmental regulations is the Environmental Contaminants Act, S.C. 1974-75-76, s.5(3).

