An Overview to the Development of Environmental Law in Canada

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Introduction

In the past twenty–five years, Canadian environmental law and policy has evolved rapidly. Its evolution seems to be accelerating at this time in terms of the nature the issues being addressed, and in the terms of the approaches taken in dealing with these issues.

The purpose of this paper is to provide a cursory overview of the development of environmental law in Canada. Rather than attempting to undertake a detailed history of the evolution of environmental law, the paper attempts to describe the development of this field of law by examining its different phases. Despite the overlap and blurred distinctions, five phases in the evolution of environmental law are identified. The underlying approaches, the reasons for the development of the particular phase, and legislative examples of the phases are discussed. Some deliberation is also given as to what the future holds in the further evolution of environmental law in Canada. While an attempt is made to be as representative as possible, examples will be largely derived from pollution–related issues.

Before these phases of environmental law are examined, it is important to first briefly describe the constitutional framework in Canada as it pertains to the environment. The evolution of environmental law has been heavily determined by this framework. In fact, it is fair to say that constitutional issues are perhaps gaining even more of a prominence as each level of government is attempting to re–define its role in the fields of environmental protection and resource management.

The Canadian Constitution and the Environment

In 1867, Canada was established as a "confederation" by the British North America Act. This confederation is a union of a number of provinces with a separate central or federal government. The British North America Act outlined the division of legislative powers between the federal government and the provinces, and the propriety interests of those jurisdictions. In 1982, through a constitutional reform process, the British North America Act was amended and renamed the Constitution Act, 1867. Further, the Canadian Charter of Rights and Freedoms was enacted,

which outlines the constitutionally entrenched basic rights and freedoms of Canadians.

Division of Powers

Not surprisingly, the drafters of the Canadian Constitution in 1867 did not contemplate environmental issues. Hence, it is of little surprise that the division of powers is such a patchwork in the context of environmental and natural resource issues.[1]

By and large, it is the provinces which have the primary jurisdiction over the environment under the Canadian Constitution. For example, jurisdiction is given to the provinces over pollution matters by virtue of their primary jurisdiction over "Property and Civil Rights" (s. 92(13)) and "Generally all matters of a merely local or private nature in the Province." (s. 92(16)) Provincial jurisdiction is also found in their control and ownership of their land, mines and minerals (s. 109) and non-renewable natural resources, forestry and electrical energy (s. 92A). Provinces, however, have limits with respect to inter-provincial and international matters and the extra-territorial effects of their laws.[2]

The federal government has certain powers to legislate with respect to the environment by virtue of a number of specific heads of power and a more general residual power. In terms of specific heads of power, the more important ones include:

* "Navigation and Shipping" (s. 91(1))
* "Seacoast and Inland Fisheries" (s. 91(12))
* "Federal Works and Undertakings" (s. 91(29) and s. 92(10))
* "Criminal Law" (s. 91(27))
* "Taxation" (s. 91(3))
* "Trade and Commerce" (s. 91(2))

In addition to these heads of power, the federal government has the power under section 91 of the Constitution Act, 1867 to regulate over matters for the "Peace, Order and Good Government of Canada." This section has been interpreted to give power to the federal government to regulate with respect to: national emergencies;

new matters not existing in 1867 which are not local matters; and matters which once were of local nature but now go beyond provincial ability to regulate and are therefore of "national concern."[3] Moreover, the federal government is given certain powers pertaining to inter-provincial and international matters.

It is often the case that both federal and provincial governments have concurrent jurisdiction over a matter. In this case, the paramountcy doctrine dictates that where both governments have jurisdiction, and where there is a conflict, the federal legislation governs.

It is important to point out that there is a continued debate as to the extent to which these heads of powers impede the federal government to take a strong or a comprehensive federal role to regulate environmental protection and resource conservation.[4] For example, the federal criminal law power has been used to prohibit conduct detrimental to public health. However, it seems that federal intrusion into provincial area of legislative competence is reserved for matters where there is strong evidence of risk to human health. Even in this instance, federal powers may be limited to prohibiting or restricting certain types of conduct or behaviour rather than the development of a sophisticated regulatory regime.

While the federal government has successfully defended its jurisdiction to enact environmental legislation,[5] it has been increasingly conservative in its understanding of its legislative authority. While one may debate the appropriate division of powers, one commentator has noted that "...constitutional law inhibits environmental laws because the jurisdictional picture dividing federal and provincial powers divides the environment into many different spheres. This division accords nicely with the point source approach to environmental problems but it conflicts with the more sophisticated ecosystem approach. ... At this point, the constitution has won over the environment."[6]

Canadian Charter of Rights and Freedoms

There has been discussion in recent years as to the potential for the development of stronger environmental protection measures or the evolution of

environmental rights under the Canadian Charter of Rights and Freedoms. For example, section 7 of the Charter states that:

> 7. Everyone has the right to life, liberty and security of person and the right not be deprived thereof except in accordance with the principles of fundamental justice.

Under this section, it could be argued that environmentally harmful activities may infringe a person's right to life or security of person. However, it has been pointed out by one commentator that there are limits to using the Charter as a tool to protect the environment.[7] First, the Charter is directed at governmental activities, and with only limited application to private activities. Second, at least one case demonstrated the problems associated with attempting to prove, in fact, that Charter rights are violated.[8] Moreover, it has been noted that the impact of the Charter "may not be as an additional means of asserting environmental protection rights, but as a negative force that may render certain environmental laws ineffective."[9] Thus far, this has not been the case, although certainly it may have "chilled" any move toward more progressive legislation in certain areas.

Constitutional Reform Proposals

In additional to the legal analysis of the constitution and the environment, mention should also be made of recent attempts to reform the Constitution of Canada. In August of 1992, the federal and provincial governments agreed to a package of reforms.[10] In regard to environmental matters, the agreement would have affected the division of powers between federal and provincial governments over certain areas of the environment, including the protection of the environment as a part of a new "social covenant" by the governments, and given new powers to a reformed Senate to veto any new tax on natural resources. Most commentators did not view the proposal as a strengthening of the constitutional regime affecting the environment, and indeed, many viewed the proposal as a significant weakening of that regime.[11] Even though the constitutional proposal was defeated by a national referendum in October, clearly,

constitutional reform will remain on the table in future years and must be taken into account in the further evolution of environmental law in Canada.

The Phases of Environmental Law in Canada

With the constitutional framework in mind, it is now appropriate to examine the evolution of environmental law in Canada. For the purpose of this paper, four phases of environmental law have been identified. Certainly, both the labelling and characteristics of these phases have to be somewhat arbitrary. Moreover, often the distinction between the end of one phase and the beginning of another can be blurred. Nevertheless, the identification of these different phases does provide a useful means to understand the trends and implications in the development of environmental law.

Further, as the above description of the constitutional context for environmental law would suggest, the evolution of environmental law in Canada really means the evolution of environmental law in over a dozen jurisdictions (including the federal government, provinces and the territories). By the very nature of this analysis, then, there will be a need for some very broad generalizations.

By the end of the 1970s, a number of commentators had identified that Canada was into its third phase of environmental law.[12] This paper will use these commentators' analysis to trace the development of environmental law and then provide some insight into the further phases of evolution since that time.

Phase I – Origins and Early Developments of Environmental Law in Canada

The judicial and legislative history of environmental law can be traced back to at least the 19th century, and no doubt, back even further in a number of contexts. In terms of jurisprudence, the doctrines nuisance, riparian rights, trespass and the doctrine of Rylands v. Fletcher have been used, to varying degrees of success, in addressing environmental problems. Most often, however, the problems were not identified as "environmental problems." Instead, they could be better characterized as property disputes or conflicts over natural resource uses.

At the federal level, the 1895 Fisheries Act[13] contains a prohibition against the

discharge of deleterious substances into waters that would affect fish. Sections of the Criminal Code could possibly also be cited as a tool to address the most blatant forms of pollution (like public nuisance and mischief), although apparently there are no known reported cases where these sections have been employed for these purposes.[14]

At the provincial level, the early origins of environmental law can be traced directly to public health legislation. In particular, public health departments were particularly concerned and often had to approve water supply and sewage treatment systems. In some provinces, public health legislation also covered other problems areas, like noise and smoke.

It is interesting to note that in some instances, legislation was enacted at this time to protect industries from liability accruing from environmental harm. In Ontario, for instance, legislation was enacted pertaining to the mining and smelting industries which shielded them from injunctive and compensatory relief from discharges and emissions from related facilities.[15]

A number of factors during the 1950s contributed to the development of specific environmental protection and natural resource legislation. These factors include:

* the "conflict between the assertion by property owners of their common law rights to use their property free of nuisance and the pressures spawned by both industrialization and urbanization."[16]

* the recognition of the inability of common law remedies to protect the environment, especially with more preventive measures;[17]

* the emergence of scientific evidence and public perception of growing environmental degradation; and

* the growth of citizen activism as a catalyst to public awareness and political sensitivity to environmental issues.

Between the early 1950s and the early 1970s, Canada witnessed the emergence of more and more environmental statutes. During this time, the federal government passed the Canada Water Act, the Clean Air Act as well as amendments

to the Canada Shipping Act and the Fisheries Act. It also passed the Northern Inland Waters Act and the Arctic Waters Pollution Prevention Act.

Also during this time, a checkered pattern of legislative developments occurred in the provinces. In a number of the provinces, and in particular Ontario, legislation was passed pertaining to air pollution, water pollution and waste management. In fact, every province had passed some two or more environmental statutes by the early 1970s.[18]

In general terms, the first phase of environmental laws in Canada can be characterized as an ad hoc approach. It reacted to problems identified, most of which were pollution-related issues. Moreover, even in this context, each medium (air, water and waste) was regulated separately, as if there was no connection between them. Clearly, the policy underlying these laws were reminiscent of much earlier times – economic growth must be furthered, virtually at any environmental cost. Pollution and natural resource degradation should only put the most broad constraints on growth, if any at all.

Phase II – Development of Environmental and Natural Resource Regimes

The second phase of environmental law can be viewed as a refinement of the first phase rather than a wholesale change in direction. It is fair to say the second phase of environmental law represented the institutionalization of environment as a legitimate and indeed permanent public policy issue.

Four salient characteristics of this phase are important to note. First, the second phase witnessed the establishment of environmental bureaucracies. In virtually every province and at the federal level, an agency was established to foster and coordinate environmental programs. The federal Department of the Environment, for example, was established in 1971.

The second aspect of this phase was, at least at the provincial level, a consolidation of the environmental legislation. Hence, it was the first time that one could identify the basic environmental framework of a province. Also, resource

development legislation was either being amended or developed in light of environmental issues ranging from mining and aggregate resources, to oil and gas exploration.

Third, the public policy base from the first phase, that natural resource degradation and pollution are an inevitable but legitimate consequence of industrial activity, found its way into regulatory regimes. By and large, the basic regulatory structure found in most legislation was a prohibition from releasing contaminants into the environment, unless such releases or discharges were authorized under a permit.[19] To be granted a permit, the releases must be within "acceptable" levels. Hence, a large part of the history of the second phase of environment law was the attempt to develop and apply different "pollution control" methodologies to determine what are "acceptable," "safe" or "reasonable" standards, guidelines, criteria and objectives. Pollution control methodologies include:

> * technology–based standards, where some technological standard (such as the best available control technology, or BACT) is used to determine an appropriate effluent or discharge limit for facilities within an industrial sector;
>
> * ambient criteria, where the goal is to ensure that water or air concentrations do not exceed certain concentrations or thresholds of pollutants. The thresholds, in turn, could be based upon a number of methodologies, such as risk analysis, cost–benefit analysis, and others.

On the resource development side, the issue was always one of "balancing" the interests of conservation with the drive for economic development.

The fourth characteristic of the second phase of environmental law in Canada is the marked lack of citizen involvement in environmental decision–making. As standards were being set, permits issued, and policies promulgated, those that were affected by such decisions, the public, were virtually excluded from such processes.[20] Moreover, not only was there a limited opportunity to participate in administrative and bureaucratic decision–making processes, there were also barriers to seeking judicial recourse for actual or potential environmental harm.[21] Most notably, issues pertaining to the lack of standing, the public nuisance rule, cost, burden of proof, and

others were symptomatic of the legal and practical kinds of problems that impeded access to the courts.

To a large extent, the second phase of environmental law in Canada created the foundation for current regimes and as such, maintains its legacy in many ways. The "consolidation" of environmental legislation should not be confused with "integration" of legislation since the problems identified in the first phase still persisted. Hence, consideration of environmental implications of decisions were considered to be an "add-on" to economic development decisions.

Phase III - Environmental Planning Regimes

The third phase in the evolution of environmental law can be considered as another layer to the framework that had emerged to date. One of the perceived weaknesses of the existing regimes was that they tended to react to environmental problems once they had occurred. As a response, there was a move in Canada, following the U.S. lead, to develop environmental planning legislation that would require an environmental study before an activity was begun. Many regarded this third phase as a new direction for environmental law, although with more than a decade and half experience with it, the overall success of such laws is still subject to continued debate.

At the federal level, a Cabinet directive in 1973 required federal agencies and departments to review the environmental impacts of federal projects. This process, eventually to become known as the Environmental Assessment and Review Process (EARP), directed agencies to undertake an initial evaluation of the environmental impacts of the project. If the impacts were not significant, the project could proceed; if they were significant, the project could be referred to a hearing panel. The hearing panel, coordinated through the Federal Environmental Assessment and Review Office (FEARO), would be comprised of persons appointed by the Minister of the Environment. The panel would conduct public hearings on the matter and then make recommendations to the Minister of the Environment, who in turn, would have the final decision. The EARP process was formalized in 1984 with the enactment of the

Federal Environmental Assessment Guidelines Order.[22]

The EARP process, both before and after the enactment of the Guidelines Order, were criticized on a number of grounds. Its lack of legislative base always created uncertainty as to whether, and to what extent, projects had to be assessed. The process itself is a self-assessment process; in effect, the proponent of the project is assigned the task to determine whether there will be environmental impacts. The environmental impact study itself did not require an assessment of the need or alternatives of the project. Instead, just the mitigative measures that may be required to minimize the environmental impact of the project had to be considered.

By the end of the 1980s, a number of court cases were initiated questioning whether EARP was mandated in prescribed circumstances of federal involvement.[23] The courts, in response, were abundantly clear – EARP was enforceable in law. In response to these cases, and previous government commitments, the federal government undertook to draft new environmental assessment legislation. In March of 1992, the federal government passed the Canadian Environmental Assessment Act, the first federal environmental assessment statute. While passed in 1992, it will not be in force until 1993 when the implementing regulations will be promulgated. This Act still requires a self-assessment process, however, it is a more elaborate one. There will be a list of undertakings that will be subject to environmental review, while another list will exempt certain projects. If the project assessed is found to have significant environmental impacts, it will be sent to mediation or a review panel. The initiating department retains the decision on the basis of the recommendation of the hearing or mediation as to whether or not to proceed with the undertaking.

At the provincial level, by the mid-1980s, most provinces had some sort of environmental assessment process or law in place. The extent and comprehensiveness of these laws varied significantly. The province of Ontario's legislation is an example of the more comprehensive kind of law. The province's Environmental Assessment Act,[24] enacted in 1975, obliged all public sector undertakings to assess the need, alternatives and mitigate measures for the undertakings. While all public sectors undertakings are included unless exempted,

private sector undertakings are excluded, unless so designated. Once an environmental assessment document has been submitted, the Minister of the Environment may refer the matter to the Environmental Assessment Board for a hearing and final decision. It should be noted though that an appeal to the provincial cabinet is possible under Ontario law.

Phase IV - The Quest for Sustainability

Throughout the early to mid-1980s, environmental law and policy at both the federal and provincial levels developed rapidly. However, for the most part, it become more institutionalized, more bureaucratic and more complex. By implication, then, environmental law and policy became more costly to administer and more resource intensive to implement. Of course, the question which is still outstanding is whether that growing body of environmental law leads to a correspondingly better environment.

Through the 1980s, the effectiveness of the environmental regimes, within Canada and internationally, were put into question. Perhaps a turning point in this discussion and an introduction into phase IV in the development of environmental law in Canada was the report of the World Commission on Environment and Development. The report, Our Common Future,[25] may not have said anything new, but did provide a useful synthesis of the current limits and needed reforms for law and policy. Certainly it is beyond the scope of this paper to outline all principles of the report.[26] However, for the purpose of convenience, the following basic principles are identified, although they are by no means exhaustive:[27]

* the "react and cure" approach must be replaced by a "prevent and anticipate approach;"

* there must be a greater integration between the environment and the economy. As such, the term "growth" will have to be defined to "make it less material- and energy-intensive and more equitable in its impact."[28] In other words, growth has to incorporate human needs, and non-economic variables such as education and health. One means to furthering this notion is through a better understanding of the "true" cost of environmentally harmful activities; and

* there must be an effort made to make environmental decision-making more

democratic. As the Brundtland Report states, "Making the difficult choices involved in achieving sustainable development will depend on the widespread support and involvement of an informed public and non-government organizations, the scientific community, and industry. Their rights, roles, and participation in development planning, decision-making, and project implementation should be expanded."[29]

The Canadian government has formally embraced the concept of sustainable development. Not only did the government of Canada strongly support the work of the World Commission on Environment and Development, but has continued to express support for the sustainable development principle. It has established an Institute for Environment and Development in Winnipeg, Manitoba, to assist in coordinating sustainable development initiatives and research. At the federal level, the National Roundtable on Environment and Economy is an effort to bring together business, governmental and non-governmental leaders to discuss current issues and suggest responses to those issues. There are also a number of roundtable initiatives at the provincial level.

Despite the support for the principle, there is still considerable confusion, if not debate, on what is meant by the term "sustainable development," its implications, and the concrete steps needed to implement the concept.[30] In fact, it may be difficult for those examining Canadian law and policy to discern any difference in approach before and after the Brundtland report.

On the other hand, it is unfair to suggest that the sustainable development concept had no effect in Canada. Although not directly attributable to the concept, the federal government initiative to develop a "green strategy" for Canada certainly finds some support with the sustainable development concept. This green strategy, entitled "Canada's Green Plan," was released in December of 1990. In broad terms, it outlined an array of initiatives ranging from the creation of national parks to new regulations for biotechnology. Some of the initiatives were very broad and perhaps too vague. Others were simply a re-packaging of existing or previously proposed programs. Of the initiatives proposed, many were neither comprehensive nor radical.

Despite these criticisms, however, the Green Plan was a novel attempt at trying to coordinate a federal environmental strategy. There remains a considerable degree of agency commitment to the Plan, and most important, the federal government is dedicating new money over a period of years to the Green Plan.

The Brundtland Report, and the thinking behind that report, can be regarded as an unequivocal signal that environmental law and policy must make some dramatic changes. But there were other reasons for recognition of the need for new directions. One reason was the public understanding that, despite previous efforts, the environment was still being degraded to an unacceptable degree. By the end of 1980s, for example, reports outlined the declining quality of the Great Lakes despite some two decades of efforts to protect and conserve one of the world's greatest sources of freshwater.[31] Another reason, related to the first, was the failure of existing approaches in terms of cost–effectiveness, efficiency and complexity. For example, the pollution control approach may have reduced the levels of releases of pollutants to environment, but still allowed the discharge of some of the most hazardous pollutants, such as persistent, bioaccumulative pollutants, which continue to threaten ecosystems.[32]

There is considerable momentum to develop a fourth phase of environmental law and policy in Canada. While the Brundtland Report gave the signal to start the thinking, it may be years yet to fully understand the implications and precise concrete programs. Nevertheless, there are a number of themes which are now emerging in this fourth phase. These include:

* *Pollution Prevention:* The failure of the pollution control approach has lead a number of jurisdictions to move toward a "pollution prevention" approach. Although the exact content of this approach is still unclear, components identified include the recognition that some pollutants should be completely eliminated or banned. Other components of the approach encourage process change to avoid or prevent the use, generation and release of pollutants. Both federal[33] and provincial[34] initiatives are examining this issue. Similarly, there is now a greater emphasis on the multi–media approach where the releases of substances are examined in totality, regardless from what medium they were initially released.[35] And finally, there has been a whole array of new agency offices established both at the federal[36] and the provincial[37] level.

* *Enhancement of Command and Control:* Another trend of the fourth phase of environmental law and policy is the desire to explore different regulatory methodologies. Traditionally, environmental law has been dominated by a "command and control" approach, which relies heavily on government intervention to set and enforce standards and other norms. The fourth phase is now broadening to include new approaches:

    * economic instruments: There are a number of research initiatives examining the feasibility and appropriateness of new environmental taxes, removal of subsidies, and grant schemes to achieve environmental objectives. These instruments would not necessarily replace command and control, but enhance that approach;[38]

    * reporting mechanisms: For the most part, reporting requirements have been thought to be a very soft approach to change behaviour. However, the experience from the Toxic Release Inventory in the U.S. has clearly demonstrated that empowering the public with information can lead to very significant changes in corporate behaviour. Canada is attempting to follow this approach through the development of the National Pollutant Release Inventory.

* *Empowering the Public:* The third trend in this fourth phase is the development of mechanisms to empower the public. While reporting mechanisms have been mentioned, there is now a trend to bestow certain environmental rights to the public. The Northwest Territories[39] and the Yukon[40] have recently enacted legislation with citizen rights included. The provinces of Saskatchewan[41] and Ontario[42] have, or are in the process of, developing "environmental bill of rights." Some of these "rights" may only be procedural rights to notice and comment, to enforce laws, or to call for a review of legislation and approvals. It does not seem that these jurisdictions are attempting to judicialize their environmental decision-making process. Indeed, there is a view that, while important in attempting to empower the public, the enactment of environmental rights may not be the appropriate means of achieving that end.[43] It is interesting to note that the courts are slowly moving toward more liberal standing rules, irrespective of legislative changes.[44]

Phase IV now presents some interesting opportunities and challenges. It is calling for a more integrated, more encompassing environmental law approach. At the same time, it is attempting to overcome some of the limits of existing approaches. It is still too early to determine what the implications are from the quest for sustainability.

Phase V and Beyond – Environmental Democracy

While Canada is still finding its way through the fourth phase of environmental law, it is only fair to recognize that many policy–makers, scholars, and environmentalists are already looking onward to another phase. The nature and content of the next phase can, at best, be the subject of speculation. However, it may be possible to provide some glimpse at this future phase.

If one were to speculate, the fifth phase will probably include some fairly dramatic changes to environmental law and policy. First, the nature of environmental law will become extremely pervasive in the sense that matters that were quite foreign to environmental analysis becomes quite common. For example, since 1988, one of the most dramatic influences on environmental policy in Canada has been the recognition of trade as a legitimate environmental issue. It brought a new dimension to the field of trade, the implications of which are still being discussed.

Perhaps the fifth phase will be viewed as a recognition that there will be a need to find "deeper" solutions to the environmental problems than new laws and new regulations. It will plead for a more value–oriented approach to environmental protection, where there will be intrinsic respect for the environment for its own sake.

As equally important, the fifth phase will attempt to draw links, introduced by the Brundtland report, between the environment and a whole array of social justice issues. The environmental dimension will continue to draw links to the struggle for gender equality, aboriginal rights, poverty, multi–cultural matters, among many other issues. This movement, sometimes called environmental justice,[45] will change the way environmental issues are perceived, how they are dealt with, and who becomes involved with them. On one hand, there is a movement for a more decentralized approach to environmental issues while also seeing environmental issues truly as an international, global problem.

Summary and Conclusions

The purpose of this paper was to provide, in general terms, an overview to the development of environmental law and policy in Canada. No doubt, there are

similarities with the U.S. experience. However, there are also significant differences, ranging from the constitutional framework to the role of environmental rights.

Phases I and II of environmental law in Canada can really be seen as the developmental stages. It is where environmental issues were being defined and the gradual recognition of the need for new or amended legislation. In so many ways, these phases defined the nature and substance of environmental law issues. Many of these laws probably are best seen as responses to the problems of the day, rather than a deliberate attempt to make a coherent environmental law regime.

Phase III, however, attempted to develop a more anticipatory regime pertaining to some new facilities. It was in Phase IV, though where some fundamental questions are being asked about the adequacy and limits of the existing framework. No doubt these questions will persist for sometime to come. Phase V will again force a very important re-evaluation of previous assumptions and approaches. This phase will undoubtly have some very interesting implications for environmental law and policy.

While environmental law continues to evolve in Canada, it does seem that the pace of this evolution is increasing over time. Like so many jurisdictions around the world, Canada is struggling to develop the most effective regime to address the omnipresent environmental challenge.

ENDNOTES

1. For further details on this subject, see: D. Gibson, "Constitutional Jurisdiction Overall Environmental Management in Canada" (1973), 23 University of Toronto Law Journal 54; A.R. Lucas, "Natural Resource and Environmental Management: A Jurisdictional Primer" in D. Tingley (ed.) Environmental Protection and the Canadian Constitution Proceedings of the Canadian Symposium on Jurisdiction and Responsibility for the Environment (Edmonton: Environmental Law Centre, 1989), p. 31–43.

2. See: Interprovincial Co-operatives Ltd. v. The Queen (1975), 53 D.L.R. (3d) 321 (S.C.C.).

3. See: Labatt Breweries of Canada Ltd. v. A.G. Canada (1980), 1 S.C.R. 914.

4. P. Emond, "The Case for a Greater Federal Role in the Environmental Protection Field: An Examination of the Pollution Problem and the Constitution" (1972) 10 Osgoode Hall Law Journal 647.

5. See: R. v. Crown Zellerbach (1988), 1 S.C.R. 401; and Canada Metal v. the Queen, (1983), 2 W.W.R.307 (Man. Q.B.), a former federal air pollution statute was held constitutionally valid on the basis of this power. Apparently, the Canadian Environmental Protection Act is now subject to a constitutional challenge also.

6. R. Northey, "Seeing Beyond the Murky Medium" (1989), 29 Osgoode Hall Law Journal.

7. A.R. Lucas, "Natural Resource and Environmental Management: A Jurisdictional Primer" in D. Tingley (ed.) Environmental Protection and the Canadian Constitution Proceedings of the Canadian Symposium on Jurisdiction and Responsibility for the Environment (Edmonton: Environmental Law Centre, 1989), p. 31–43, at pp. 40–41.

8. Operation Dismantle v. The Queen (1985), 59 N.R. 1, (1985) 18 D.L.R.(4th) 481 (S.C.C.).

9. Lucas, "Natural Resource and Environmental Management: A Jurisdictional Primer," p. 41.

10. Charlottetown Agreement, August 28, 1992.

11. For further background and comment, see: W. Andrews, "Opportunity Lost: Environmental Comments on the August 1992 Canadian Constitutional Accord" Prepared on behalf of the West Coast Environmental Law Association, September 14, 1992; B. Rutherford and P. Muldoon, "Designing an Environmentally Responsible Constitution" (1992), 18 Alternatives 26.

12. D. Estrin, "Annual Survey of Canadian Law – Part 2 – Environmental Law" (1975), 7 Ottawa Law Review 397, hereinafter referred to as Estrin (1975); J. Swaigen, "Annual Survey of Canadian Law – Environmental Law 1975–1980" (1980), 12 Ottawa Law Review 439, hereinafter referred to as Swaigen (1980).

13. Fisheries Act, Can. Stat. 1895, c. 27.

14. Estrin, (1975), p. 400.

15. See: Estrin (1975), at 401 where a number of examples are given.

16. Estrin (1975), at p. 402.

17. Generally, see: McLaren, "The Common Law Nuisance Actions and the Environmental Battle – Well–Tempered Swords or Broken Reeds," (1972) 10 Osgoode Hall Law Journal 505; Elder, "Environmental Protection Through the Common Law"(1973), 12 Western Ontario Law Review 107.

18. Estrin (1975), p. 404.

19. For a description of the air quality regimes in this regard, see: M. Mellon, L. Ritts, S. Garrod and M. Valiante, The Regulation of Toxic and Oxidant Air Pollution in North America (Toronto: CCH Canadian Ltd., 1986).

    Also see: D. Estrin and J. Swaigen (eds.), Environment on Trial: A Handbook on Ontario Environmental Law (Revised and Expanded Edition, Toronto: Canadian Environmental Law Research Foundation, 1978).

20. For example of the literature in this regard, see: R.T. Franson and A.R. Lucas, "Environmental Decision–Making in British Columbia" in P.S. Elder (ed.) Environmental Management and Public Management (Toronto: Canadian Environmental Law Research Foundation and Canadian Environmental Law Association, 1975).

    P.S. Elder, "The Participatory Environment in Alberta" in P.S. Elder (ed.) Environmental Management and Public Management (Toronto: Canadian Environmental Law Research Foundation and Canadian Environmental Law Association, 1975).

P.S. Elder, "An Overview of the Participatory Environment in Canada" in P.S. Elder (ed.) Environmental Management and Public Management (Toronto: Canadian Environmental Law Research Foundation and Canadian Environmental Law Association, 1975).

21. For example, see: A. Roman, "Locus Standi: A Cure in Search of a Disease?" in J. Swaigen (ed.) Environmental Rights in Canada (Toronto: Butterworths, 1981), 11–59. Also see: Hickey v. Electric Reduction Co. (1972) 21 D.L.R.(3d) 368 (Nfld. S.C.).

22. Government Organization Act, 1979, Environmental Assessment and Review Process Guidelines Order, SOR/84–467, 22 June, 1984.

23. For example, see: Friends of Oldman River Society v. Canada (Minister of Transport) (1992), 7 C.E.L.N. (N.S.) 11 (S.C.C.).

24. Environmental Assessment Act, R.S.O. 1980, c. 140.

25. World Commission on Environment and Development, Our Common Future (Oxford: Oxford University Press, 1987), hereinafter referred to as the "Brundtland Report."

26. See: M. Valiante, "Forging Future Options" (1989), 96(1) Queen's Quarterly 23.

27. For another, more exhaustive discussion in a Canadian context, see: Ontario Round Table on Environment and Economy, Challenge Paper (Toronto: Ontario Roundtable on Environment and Economy, 1991).

28. Brundtland Report, at p. 52.

29. Brundtland Report, at p. 21. Also see p. 46.

30. There are a number of publications that attempt to examine the implications of sustainable development in a legal context, see: The Canadian Bar Association Committee Report, Sustainable Development in Canada: Options for Law Reform (Ottawa: Canadian Bar Association, 1990); J. Owen Saunders (ed.), The Legal Challenge of Sustainable Development (Calgary: Canadian Institute of Resources Law, 1990).

31. For one of the most comprehensive reports in this regard, see: T.E. Colborn, et al. Great Lakes Great Legacy? (Washington: The Conservation Foundation and the Institute for Research on Public Policy, 1990).

32. For these pollutants, the pollution control approach does not reduce overall loadings of chemicals. Moreover, pollution control techniques often prevent pollutants from getting into part of the environment by putting them into another. Sludge from a waste-water treatment system is often buried or buried. Contaminants from the incinerator or landfill still many eventually impact the water quality that the waste-water treatment system were trying to prevent in the first place. For further discussion, see: National Wildlife Federation and Canadian Institute for Environmental Law and Policy, A Prescription for Healthy Great Lakes (Washington: National Wildlife Federation, 1991), Chapter 4.

33. During the past year, the federal government has sponsored a process with industry, environmentalists, labour and government to develop criteria for the purposes of identifying chemicals to be eliminated or reduced, call the Accelerated Reduction and Elimination of Toxic Substances (ARETS).

34. Ontario Ministry of the Environment, Candidate Substances List for Bans and Phase-outs, (Toronto: Hazardous Contaminants Branch, 1992).

35. Ontario Ministry of the Environment, "Pollution Prevention New Focus of MISA Program", Press-release, September 26, 1991.

36. At the federal level, for example, there is now the National Office of Pollution Prevention and the Great Lakes Pollution Prevention Office.

37. The Province of Ontario recently established the Office of Pollution Prevention.

38. For example, the Ontario Fair Tax Commission has a working group looking at these issues. The province is also about to charge a fee for certain pollution permits.

39. Environmental Rights Act Seventh Session, Eleventh Legislative Assembly of the Northwest Territories, assented to on 1990-11-06.

40. Bill 20, Environment Act, 2nd Sess., 27th Leg., Yukon Terr. 1991, assented to May 29, 1991.

41. Province of Saskatchewan, Bill 48 of 1992.

42. Ontario Ministry of the Environment, Report of the Task Force on the Ontario Environmental Bill of Rights (Toronto: July 1992).

43. For example, see: D. Paul Emond, "The Greening of Environmental Law" (1991) 36 McGill Law Journal 742; C. Giagnocavo and H. Goldstein, "Law Reform or World Reform: The Problem with Environmental Rights" (1990), 35 McGill Law Journal 345.

44. For a full discussion, see: Ontario Law Reform Commission, Report on the Law of Standing, 1989.

45. See generally: P.S. Wenz, Environmental Justice (Albany: State University of New York Press, 1988).