6th Annual Report on Ontario's Environment

Canadian Institute for Environmental Law and Policy
L'Institut Canadien du Droit et de la Politique de L'Environnement
www.cielap.org

Canadian Institute for Environmental Law and Policy
L'Institut Canadien du Droit et de la Politique de L'Environnement
www.cielap.org

Sixth Annual Report on Ontario's Environment

Written by Christine Elwell*, Joseph Castrilli**, Veronica Chau***
*Chapter 1, **Chapters 2,4,5, ***Chapter 3

Acknowledgements

The Canadian Institute for Environmental Law and Policy would like to thank the Laidlaw Foundation for their support of this project. We would also like to thank Andrea Bailey, Jack Gibbons, Theresa McClenaghan, and Mark Winfield, for reviewing earlier chapter drafts, in addition to Daria Smeh.

For more information about this publication or its publisher contact:
Anne Mitchell, Executive Director
Canadian Institute for Environmental Law and Policy
517 College Street, Suite 400
Toronto, Ontario
M6G 4A2

telephone: (416) 923-3529
facsimile: (416) 923-5949
e-mail: cielap@cielap.org
www.cielap.org

Printed in Canada on 100% recycled paper by unionized labour. ISBN #1-896588-15-8

TABLE OF CONTENTS

INTRODUCTION

Introduction

As we undertake the sixth-annual report on Ontario's environmental protection and natural-resources management efforts, it is timely to reflect upon the course of environmental protection in Ontario and to learn the lessons from the Walkerton tragedy as we all strive to achieve sustainable development. Seven people died and more than 2,000 fell ill in May 2000 when the southwestern Ontario town's water system was contaminated by E-coli bacteria. Largely in response to Walkerton, the Ontario government retained a management-consulting firm to look at its oversight of environmental issues in the province. The much-anticipated *Managing the Environment Report: A Review of Best Practices*, written by Valerie Gibbons, provides a background to and rationale for the government's approach to environmental management. The report compiles examples of flexible models from other jurisdictions and combines them into a conceptual framework of "integrated compliance" that features cooperative agreements with the private sector that can override important functions of public ministries and local governments.

Environmental protection and natural-resources management in the province have undergone an enormous transformation over the past six years. The province has reversed the trend, extending over the past half-century, of gradually strengthening the protection of Ontario's environment and the conservation of its natural resources. Instead, there appears to have been an abandonment of any commitment to long-term environmental planning and to a truly integrated approach to sustainable development.

Rather than building the social consensus necessary to achieve sustainable development, the government has attempted instead to consolidate its vision of environmental governance by delegating evermore authority to a self-regulating private sector. The long-term consequences of this direction for current and future generations of Ontarians are likely to be deadly serious, and in many cases, irreversible and may not achieve sustainable development.

The authority over environmental matters that has been retained by provincial ministries and local governments could still be important in crafting legal and judicial responses to anticipated trade and other constitutional challenges in the near future. Future governments may also wish to reestablish public control over the authorities that have been delegated to an unaccountable private sector to manage public goods such as clean air and water.

In **Chapter 1, New Vision, New Minister, New Plan? Val Gibbons' Managing the Environment Report,** we review in detail the significant reliance placed on the Dutch decentralized approach to sustainable development. Under the Dutch model, at the end of a four-year national policy and scientific review, cooperative agreements are often negotiated with mature industrial sectors, sectors that have existing, well-established environmental regimes. For the Ontario government, on the other hand, cooperative agreements and management plans appear to be the means to achieving sustainable development and not the end product of a public and politically accountable process.

Even according to papers included in the Gibbons' Report itself, the benefits in terms of policy coherence, policy and technical innovation and acceptance of voluntary approaches to environmental governance, are not self-evident.

Since the Gibbons' Report, the government has proceeded with a legislative agenda that implements an "integrated approach" to environmental governance. This approach relies on government providing "compliance assistance" rather than strong regulation and allows industry, including large agricultural operations, to draft and implement their own environmental management plans; self-screen the environmental and public health impacts of new projects; and self-report on those impacts.

In recommending the further delegation of environmental responsibilities to the private sector, the Report relied upon the Dutch approach to driving sustainable development. But this reliance is misplaced given the North American reality. Dutch covenants with mature industrial sectors implement pre-existing and clearly articulated and financed government policy; they do not define it. Unlike the current legislative trend in Ontario, the Dutch do not delegate standard setting and compliance assurance to industry before the expectations of a social consensus are codified within a solid environmental framework, together with an effective local capacity to govern.

The current government has confused the end game of sustainable development with the means to get there. The benefits of policy coherence, policy and technical innovation and a growing acceptance of voluntary approaches to environmental management do not appear to be self-evident. Yet the risks – human health, environmental, trade-related, and constitutional – are just too great to allow an unaccountable private sector to manage public goods such as clean air and water. While we recommend the quick implementation of the many positive aspects of the Report – ecological monitoring, greater public transparency and engagement – we suggest further empirical research into and public discussion on the more controversial aspects of the Ontario government's approach to environmental management.

Water as "Ground Zero"

In CIELAP's *Fifth Year Report*, water was "ground-zero" in terms of the impact of the Common Sense Revolution on Ontario's environment. There were deaths and illness in Walkerton from drinking contaminated water. There was fear and anger in rural areas across the province over the increasing impact of animal wastes from intensive livestock operations on rivers, lakes, and streams. There was the on-going issuance by the Ministry of the Environment (MOE) of permits to take water and an increasing lack of public confidence that the government has any real regulatory handle to control removals of surface and groundwater by commercial and industrial interests.

Chapter 2, Water, reviews potentially excessive water takings, their impacts on the environment, and proposals to stem the tide of what amounts to "water mining" in this province. Finally, these concerns were played out again at the regional and transboundary level as governments on both sides of the Great Lakes - but particularly Ontario - took turns picking up and dropping the ball on water-quality and water-quantity issues.

As a result of all of the above, CIELAP has decided that in this year's report it is necessary to provide both a recap of, and update on, the overall provincial water situation, including an outline of the evidence submitted in the Walkerton judicial inquiry. In doing so, the chapter addresses what should be the four key components of sound water policy in Ontario – but currently are not. First, drinking-water protection. Second, source-water protection, with a primary focus on agriculture. Third, water- conservation measures. Finally, measures to protect both the water-quality and water- quantity of the Great Lakes.

Drinking Water Protection

In its *Fifth Year Report*, CIELAP reported on, and briefly summarized the contents of, the June 2000 Ontario government proposal to promulgate a drinking-water regulation. In many respects, the ability of the provincial government to ensure the delivery of safe drinking water to the Ontario public is at the heart of the inquiry established in June 2000 into the drinking water related deaths and illnesses from *E. coli* bacteria that occurred at Walkerton. Overall, the first phase of the inquiry raised serious concerns about provincial decisions to close government water-testing laboratories; rely on voluntary compliance, and; cutback MOE budgets, staffing, training, and oversight.

If a consensus can be said to have emerged from the evidence in the Walkerton Inquiry about what may be needed in future to secure safe drinking water for the Ontario public, it can be said to have focused on the need for a new safe drinking water law. From a review of drinking-water legislation in other jurisdictions, and recommendations made to the commission during the inquiry, we review what might be key components of such a law (and how Ontario's existing regime currently

measures up). But without restoration of all of MOE's slashed budget and staff and a significant infusion of new funding, the ministry could not possibly take on added statutory responsibilities in the drinking-water area at this time.

The Walkerton Inquiry generated considerable information about the magnitude of potential impacts to source-water quality from agricultural activities. Commission-sponsored studies indicated, for example, that non-point sources of water pollution (i.e. overland runoff) are contributing as much as two-thirds of the surface water pollution in waterways of the United States. The largest contributor by far is agricultural activity, including sediment runoff, nutrient loadings and pathogens from livestock. The Ontario government's response to Walkerton was the *Nutrient Management Act, 2001,* which this report finds to be inadequate to address water quality in the specific context of intensive livestock operations. It also points to the general demise in the regulatory environment in the province arising from the weakening of environmental laws, dramatic declines in enforcement efforts, and significant budget and staff reductions at the Ministry of the Environment during the Harris years.

Air Quality and Emission Reduction Strategies

Since CIELAP's *Fifth Year Report*, developments in air quality and monitoring have been fairly rapid. **Chapter 3, Air Quality and Monitoring,** confirms that Ontario's air has become a health hazard. The Ontario Medical Association has estimated that the poisons released into our air contributed to 1,900 premature deaths in 2000. Ontario must bring about considerable change in order to prevent any further deterioration in air quality and further damage to human health. This is a formidable challenge. The provincial government has used a number of different strategies to address its long-term commitment to improving air quality,. Despite these efforts, levels of dangerous substances, such as nitrogen oxides, carbon monoxide and ozone, actually increased from 1995 to 1998. This report analyzes some of the factors that contributed to the inefficiency of the government strategies and makes forward-looking recommendations for how these strategies could be improved.

A major driver for change is the restructuring of the province's electricity sector. Since power generation is one of the major contributors to climate change and to health hazards such as smog and acid rain, proactive measures must be taken in order to prevent restructuring from compromising Ontario's health and environment. The chapter reviews government efforts to set emission limits on air pollutants; its response to an increasing number of smog-alert days; its promise to require clean technologies at coal-fired power plants; and the emerging elements of a cap-and-trade emissions credit system.

Fundamental to the success of these initiatives is mandatory and verifiable monitoring and reporting of air emissions and reductions by industry. This chapter critically examines government measures in this regard. It finds that while the government's monitoring proposal is quite comprehensive in the amount of pollutants to be reported, in the end the system relies largely upon self-regulation by industry instead of on a well-funded and motivated Ministry of Environment to ensure Ontarians enjoy good air quality. Without improvements, the opening of Ontario's market to competition in the electricity market will likely lead to more air pollution instead of less, despite government promises otherwise.

Hazardous Waste and Brownfields

In CIELAP's *Fifth Year Report*, we noted that, since 1994, the generation of hazardous waste within Ontario had increased sharply.

Chapter 4, Hazardous Waste and Brownfields, provides an update on the situation in Ontario by considering four matters. First, we examine recent, somewhat contradictory, findings of the federal government on the generation and import of hazardous waste in Ontario. Second, we compare the federal government findings to American reports — authored in part by CIELAP — on hazardous-waste shipments to Ontario. Third, we review the on-going problem of the concentration of hazardous waste disposal in the Sarnia area. Fourth, we consider the aftermath of government investigations into the alleged dumping of hazardous wastes at the Taro Landfill.

Despite public concerns, the Ministry of Environment believes the hazardous waste situation to be improving. MOE optimism appears to be based on the reduced quantity of hazardous waste imported in 2000, which Environment Canada also appears to take some comfort in. The question explored in this chapter, however, is whether that optimism is justified.

The trend of increasing hazardous-waste imports to Ontario and concern about the classification of some waste shipments (some shipments regarded as hazardous wastes under American law were not classified as hazardous under Ontario law) led to amendments to provincial hazardous-waste regulations, which came into force on March 31, 2001. Key changes to defining hazardous wastes were made in the new regulations. What these changes do and what they should do was the subject of a new CIELAP report released at the time.

For example, with regard to the new leachate toxic-waste test procedure, the new Ontario requirements allow an MOE director to substitute an "equivalent test method" for the Toxicity Characteristic Leaching Procedure (TCLP), but do not set out criteria for the application of this substitute approach. In contrast, American law does not permit substitution of any other test method for the TCLP, except by petitioning for an amendment to the regulations. Similarly, proposed new Canadian federal transportation law reforms do not authorize any departure from the use of the TCLP. Accordingly, this new discrepancy between Ontario and federal requirements in Canada and the United States could pose problems in future for the transboundary and interprovincial movement of leachate toxic waste.

This chapter also reveals that the province's reforms exempt four broad hazardous waste streams from the rule changes and, therefore, from being regarded in law as hazardous waste in Ontario. While this initiative on its face may be intended to encourage recycling in a manner similar to requirements in the United States, the American waste-class exemptions operate in a far stricter regulatory context than Ontario's. Therefore, Ontario's adoption of exemptions without the adoption of a comparably strict regulatory framework will be problematic.

A potential future environmental issue with Ontario hazardous-waste sites is the question is the long-term adequacy of landfills that have been receiving waste deemed hazardous in the United States, but not legally considered hazardous in Ontario. Whether these sites have been properly engineered to deal with these wastes remains to be seen. The new Ontario regulations do not address this potentially major problem by implementing any further requirements on these sites.

While reforming Ontario law on the definition and identification of hazardous waste is important, it is just the first step. For Ontario to avoid a continuation of the trend of rapidly increasing imports of hazardous waste, the province will need to pursue a more comprehensive approach to hazardous-waste regulatory reform. Adoption of the following measures may be necessary:

1. rigourous standards for the treatment, storage and disposal of hazardous waste;
2. restrictions on the land disposal of untreated hazardous waste;
3. imposition of comprehensive liability for hazardous waste mismanagement, and;
4. incentives, if not requirements, to reduce hazardous-waste generation, e.g. hazardous-waste charges.

Initiatives such as these would also contribute to assisting Canada in meeting its domestic legal and international obligations on the control of transboundary movements of hazardous wastes and protection of the Great Lakes. Taking the first step is important, but Ontario's long-term strategy for hazardous-waste management remains unclear. A failure to develop a comprehensive strategy may create problems for the province in future as it tries to deal with the end result of the hazardous-waste problem: contaminated lands or "brownfields."

To date, the Ontario government has mostly relied upon lenders and developers to voluntarily clean up contaminated lands. The motivation for these private parties has been the threat of exposure to environmental orders or quasi-criminal liability under the *Environmental Protection Act*. The

Ministry of the Environment's role in the process has been primarily advisory, as it largely does not approve, review or "sign-off" on cleanups. This has led some groups to characterize Ontario's approach as a system of self-regulation and to express concern about the adequacy of the cleanups performed. This chapter concludes with a review of Bill 56, *The Brownfields Statute Law Amendment Act, 2001* and questions whether this new legislation simply further perpetuates the government's reliance on self-regulation.

Ontario's New SWAT Team

The thesis of **Chapter 5, Enforcement: The New SWAT Team,** is simple. In the decade before the ascension to power of the current government, Ontario had developed a reasonable program of environmental compliance and enforcement under three different provincial governments. With the advent of the new regime, environmental compliance and enforcement efforts went into a — some would say rapid and precipitous — decline. As a result of a number of recent events — some insidious, some calamitous — the government has rediscovered the value of environmental compliance and enforcement efforts.

The Soil, Water, Air Team (SWAT) is the name the government has given to its renewed effort to become active in environmental compliance and enforcement. The questions that linger are how effective is this initiative?, how long will it last?, and when will the many other valuable functions of the Ministry of the Environment also be rediscovered?

The arrival of the Ontario government in 1995 signaled a sea change in MOE compliance philosophy. In previous reports, CIELAP has documented in painful detail many of these changes, including deep cuts to the MOE budget, cuts to professional and support staff; legislative amendments to streamline approvals or deregulate certain areas of activity; and an emphasis on voluntary compliance measures as a substitute for governmental compliance initiatives.

Two recent reports illustrate the cumulative effect of these initiatives on the adequacy of environmental compliance in Ontario. The first is the 2000 Annual Report of the Provincial Auditor of Ontario. The second is the 2000-2001 Annual Report of the Environmental Commissioner of Ontario. Both paint a bleak picture.

Given the battering MOE has taken on a variety of environmental fronts, especially following the events of May 2000 in Walkerton, it was perhaps not surprising that the government would "rediscover" the virtues of compliance and enforcement and respond in some dramatic manner to regain credibility with the public. In September 2000, the government announced the formation of SWAT. The chapter summarizes the purposes of SWAT, its record to date, and possible future directions.

What is perhaps most important in the creation of the SWAT team, is a recognition by the government that compliance and enforcement must work in tandem to protect the public interest. On its face, the SWAT initiative appears to be a tentative first step toward the resurgence of vigourous environmental compliance and enforcement measures in Ontario. But an attempt in August 2001 by CIELAP to obtain more comprehensive information about SWAT's performance through a *Freedom of Information Act* request was, at the time of writing, unsuccessful.

Certainly, MOE front-line staff members believe that the SWAT team has been highly effective, particularly because of the commitment of senior management, training, resources and manpower to the program. They contrast the SWAT team with the current unsatisfactory situation in MOE District offices where environmental officers are responsible for a broad range of issues and therefore cannot develop adequate expertise in specific areas.

MOE front-line staff members would like to see the SWAT team concept formalized and expanded to all aspects of abatement, investigation and enforcement work as well as fully integrated with District offices. They believe that the result would be specialized groups of officers, working in conjunction with investigation and enforcement personnel, taking a proactive approach to examining all priority sectors, including water and sewage.

If SWAT is to move in that direction, one of the first things that will have to happen is that members of the team become truly permanent members of the civil service. According to evidence given during the Walkerton Inquiry by a member of the IEB, all current members of SWAT are on contracts of two years or less in duration. This hardly squares with Minister Witmer's statement in May 2001 that SWAT is a permanent unit within MOE.

The final issue of concern is that SWAT may be an island of effectiveness in a still largely dysfunctional MOE. The funding and staff cuts that have so devastated the ministry over the last six years have not been undone. Thus, the question that remains is, having re-discovered compliance and enforcement as a virtue to be embraced, will the government follow through and recognize that in the long run, SWAT by itself is not a sustainable model if the MOE remains a starved remnant of its former self?

CHAPTER 1. NEW VISION, NEW MINISTER, NEW PLAN?

"In February of this year, when the Ministry of the Environment accepted the report from Val Gibbons, entitled Managing the Environment: A Review of Best Practices, *it signaled a fundamental shift in the way our province will go about protecting the environment"*

– Hon Elizabeth Witmer, Minister of the Environment

I. Introduction: Confusing the Ends with the Means

The *Managing the Environment* report was refreshingly candid about its vision for environmental management in Ontario. As we undertake our sixth-annual report on Ontario's environment, it is timely to reflect upon the course of environmental protection in Ontario and to learn the lessons from the Walkerton tragedy as we all strive to achieve sustainable development.[1] Seven people died and more than 2,000 fell ill in May 2000 when the southwestern Ontario town's water system was contaminated by E-coli bacteria.[2] The much-anticipated Valerie Gibbons' *Managing the Environment: A Review of Best Practices* report provided the background to, and rationale for, the government's approach to environmental management in the wake of the Walkerton crisis.

The report compiles examples of flexible environmental-management models from other jurisdictions and combines them into a conceptual framework that relies heavily on cooperative agreements with the private sector that can take precedence over public interests. Under the current government, functions of public ministries and local governments, such as approvals, standard setting, monitoring and enforcement, have increasingly been devolved to the private sector. Since receiving the *Managing* report, the government has proceeded with a legislative agenda that implements an "integrated approach" to environmental governance where compliance is based on self-imposed industrial and agricultural management plans, self-screening for environmental assessment of new projects, emissions self-reporting and self-monitoring of environmental and public-health impacts.

Our review of the risks involved with this approach, including public health, environmental, trade-related and litigation impacts, indicates that extreme caution is in order. In general, we find that the report confuses the end with the means. Significant reliance is placed on the Dutch decentralized approach to sustainable development, where cooperation agreements with mature industrial sectors are often negotiated. It should be noted that these agreements began after a four-year national policy setting and scientific review process and were accompanied by financial transfers to local governments. The Dutch approach views self-regulation as a means to an end – sustainable development – not an end in and of itself.

This review found that:

- The report's conceptual framework of "integrated compliance" would see self-regulation through cooperative agreements with industry replacing enforceable legal standards without a solid foundation in policy or a social consensus around this approach.
- The government is implementing the framework with "compliance assistance" in the form of government guidelines that industrial and agricultural sectors can redefine in management plans and which can override local by-laws.
- The report confuses the means with the ends of environmental protection through an inappropriate reliance on Dutch models of cooperative agreements with a mature industry operating within a well-grounded social consensus and environmental framework. This necessary pre-condition to an integrated approach to compliance assurance is absent in Ontario.
- Contrary to the contentions in the report, the alleged benefits of environmental-policy coherence, policy and technical innovation

and a growing acceptance of voluntary approaches to environmental governance are not self-evident. It is astounding that the report presented absolutely no evidence that voluntary approaches are either effective or cost-efficient.

- The remaining elements of public control in provincial ministries and local government may be important, however, in crafting legal and judicial responses to anticipated trade and other legal challenges. A later government may wish to regain public control over the delegation of authority to an unaccountable private sector to manage public goods such as clean air and water.
- There are significant public interests at risk with this approach to environmental management, including human health, environmental, trade-related and constitutional.

In summary, in recommending the further delegation of environmental responsibilities to the private sector, the report confused the end game of sustainable development with the means to get there. The government's reliance upon the Dutch approach to sustainable development with a mature industry is misplaced given the North American reality.

1. Why this report?

Valerie Gibbons' report was released on February 7, 2001[3]. The report was commissioned by the Ontario Premier as part of his response to the overwhelming public criticism surrounding the Walkerton disaster. The report is very lengthy — 329 pages, plus a 29 page executive summary and 12 appendices.[4] However, it avoids discussing the impact of the government's cuts on environmental protection in general and on the performance of the Ministry of the Environment (MOE) in particular. Instead, it offers a management analysis of the ministry in comparison to other environmental regulators, with an emphasis on adopting "flexible" management systems.

Some of the report's recommendations are not novel. Many of them have been made repeatedly by environmental groups, the Provincial Auditor and the Environment Commissioner of Ontario. For example, it was suggested that the ministry should have a "vision" and create a high-level, government-wide approach to environmental management. "One of the single biggest issues facing the Ministry of Environment and the government is the absence of a vision for the future of environmental management in Ontario," says the report.

Among other recommendations were that the ministry should have, and use, measurable indicators of the effects of its policies and practices on public health and the environment, and focus on continuous improvement in environmental practices rather than just ensuring that only minimum standards are met. As well, the report suggested that the Ministry should monitor and report on Ontario's environmental status. This information should be transparent and accessible to the public. Further, governments should make better use of their data and link databases. Senior management should take time to develop high-level policy and to think about emerging issues. MOE should have a plan for environmental research, and should rebuild its links with the scientific community.

The government's main approach to environmental management, however, is a core belief that "command and control" enforcement should only be part of an "integrated compliance" plan that includes education, technical assistance, voluntary compliance and administrative penalties. A cornerstone of this "integrated approach" is that environmental protection should be implemented by a variety of ministries, not just by the Ministry of Environment. It is true that government cannot do it all. Indeed a number of recent laws and pending bills suggest the government is keen to continue with an integrated approach to environmental management and compliance assurance.

The government's response to Walkerton was to deny any responsibility[5] although it had privatized water-testing facilities, drastically cut the budgets of both the Ministry of Environment and Natural Resources, and did nothing to regulate the growth of intensive livestock operations in rural Ontario even after they became known public health hazards.

By retaining a management consultant to review

best management practices in other jurisdictions, the government could deflect criticism and be seen to have reacted immediately and decisively pending the outcome of four separate investigations around the Walkerton event. One of these is the judicial inquiry by Mr. Justice Dennis O'Connor into the contamination of Walkerton's water supply, which found, among other things, that the MOE's use of water-quality guidelines rather than legally binding regulations for chlorination and monitoring contributed to the tragic events in Walkerton.[5b] The *Managing* report provides a counterweight to the anticipated recommendations in Part II of the Inquiry's report that the province should return to an enhanced public system of water and public health protection to avoid future "Walkertons."

The current government has come under intense criticism for cutting environment ministry staff by more than 50 per cent (about 1,400 people) and cutting the budget by 44 per cent since coming into power in 1995.[6] Although some new resources have been allocated, these were for making governance change – the creation of an Office of Implementation - and not for front-line functions. Outsourcing of many operational and program delivery functions and further downloading to under-financed local and municipal bodies that lack the lawful capacity to properly govern on these issues has also occurred. Instead of building up the public sector, we have seen more public-private partnerships, more non-regulatory measures, and more voluntary initiatives.[7]

Since the release of the *Managing* report the government has created the Office of the Implementation and Transition Secretariat with a reported budget of $4 million. [8] This office has been busy implementing at least parts of the report. Most importantly it has arranged for "compliance assistance" to the private sector based on the new management framework that features the further delegation of legislative authority to self-regulated entities.

The *Managing* report does make a number of positive recommendations. For example it says that a command-and-control approach to environmental management is "the essential backbone for the new tool kit" (p.30). It calls for greater transparency and inclusiveness as well as improved ecosystem monitoring and public reporting of environmental and public health information.[9] A recent CIELAP report, however, revealed the ongoing inadequate state of water-quality monitoring in Ontario.[10] We wonder why the government has not yet taken the report's advise to ensure these fundamentals of environmental governance?

A. The legislative implementation of the report

In addition to the public administrative functions of the Office of Implementation, the government has pursued a legislative agenda consistent with implementing the recommendations of the report. The government has, for example, enacted general enabling legislation that gives statutory authority to the Lieutenant Governor in Council (the cabinet), to set out in regulations the standards, if any, to apply to a particular sector or subject matter. Within this framework, regulatory standards are to be informed by so-called "management plans" that are to be developed by the industry itself. In many cases, explicit instructions are given in the legislation that these management plans can supercede higher local standards, such those contained in municipal by-laws.

That this delegation of legislative authority takes rule-making functions away from public ministries and gives them to the private sector without any further need for legislative debate is extraordinary.

While control often remains technically with government ministries, in practice there is currently not enough government staff to read — let alone analyze and prosecute where necessary — the compliance, monitoring and reporting data that is submitted by industry. (The remaining elements of public control will be an important factor, however, should a court strike down these schemes as unconstitutional.)

This review of the *Managing* report and its subsequent implementation builds upon previous CIELAP research into the legality of delegated legislative authority. Indeed, the trend to move the management of environmental governance from public ministries to a self-regulated private sector

may open the door to claims for regulatory negligence.

Since the *Managing* report, the trend in legislative design has tended toward a conceptual framework of environmental governance that features industry-led voluntary standard setting and compliance assurance. The proposed *Nutrient Management Act*, for example, which purportes to respond directly to the health and environmental hazards associated with intensive livestock operations, is a case where private management plans can supersede both provincial guidelines as well as local by-laws.

The features of self-screening to determine environmental-assessment requirements for new electricity projects, including hydroelectric dams, on Ontario's waterways and self reporting and monitoring of air emission are also new legislative approaches that have arisen since the report. However, government and industry may have failed to consider the political and legal risks involved should the balance between private and public interests be determined by the electorate to be unsustainable and/or by the courts to be unconstitutional.

B. The NAFTA connection

During any future election, there may be promises to restore environmental governance, standard setting and compliance operations in a well-funded and reinvigorated public sector. But because of the 1994 North American Free Trade Agreement (NAFTA) and the emerging General Agreement on Trade in Services (GATS), this promise may not be possible to fulfil or it may be much more costly to implement than expected.

Once public-service monopolies are "redesignated" into public-private partnerships or are delegated to the private sector altogether, national treatment obligations arise. These obligations require market access for non-domestic service providers and foreign investor compensation for the expropriation of anticipated profits should a later government decide to regain public control of key sectors such as water, transport or energy. The public-interest implications of the movement of environmental governance and sustainable development decisions from democratically elected legislatures to the boardrooms of global private corporations are enormous.

The early implementation of the least controversial and, indeed positive, aspects of the *Managing* report should proceed immediately.[11] But some of the more controversial aspects require further consideration and public discussion. It is hoped that this review of the Gibbons' Report on Managing the Environment will contribute to an informed and lively debate. Building a social consensus is a necessary first step to achieve true sustainable development.

II. Background to the Report

The *Managing* report was produced for a reported $800,000 by a team of consultants led by Valerie Gibbons, a former Ontario deputy minister[12]. The specific mandate of the team changed over time. Generally the team's mandate was to review the Ministry of Environment and its policies and programs and to look at "best practices" in other jurisdictions.

This report was a response to public demands for an investigation into the safety of Ontario's water supply. An anonymous caller twice warned the Environment Ministry's Spills Action Centre (SAC), headquartered in Toronto, that there were problems at the Walkerton water treatment plant 24 hours before the Walkerton Medical Officer of Health made the news public. Normally, the SAC is supposed to respond immediately. However, it too, was suffering with a lack of adequate staff and insufficient budget. It was in no position to launch an immediate investigation.[13]

A. Changing mandate for Gibbons?

The first announcement of the Gibbons' mandate, a government press release on June 16th, 2000, spoke of the need for specific water-testing standards, protocols and the communication of test results. The release said in part:

"Among other things, Gibbons' will provide counsel on standards and best practices to safeguard public and environmental health and safety and lead a team that develops guidelines to ensure

best practices and standards are communicated and enforced …

Her action-oriented team will: Identify best environmental health and safety practices for the protection of water, land and air, drawing on the experience of both Canadian and international jurisdictions. Recommend improved practices including regulatory frameworks, **scientific and professional standards and education, guidelines, testing protocols and frequencies, and reporting and notification responsibilities**…" (Emphasis added).

"The search for improvements must be an immediate and ongoing exercise," said Premier Harris. The people of the province were assured that the government would immediately and directly address the public health crisis in Walkerton with specific water-testing standards and protocols.

When one looks at a later government press release announcing the completion of the Gibbons' Report, the scope of the team's mandate appears to have changed from one specifically addressing the Walkerton situation to one of recommending "new environmental management approaches" more generally. The February 7, 2001 press release read in part:

…"The Managing the Environment report recommends a new forward-looking government vision which will ensure that all ministries take responsibility for environmental protection…Specifically, to make strategic shifts from the status quo, the report includes the following recommendations: Move away from the decades-old, rigid, command-and-control organization towards a more effective and flexible set of tools and incentives. Instead of working under the assumption that government can do it all, move towards increased partnership with the public, the private sector and others. Instead of an out-dated, one-ministry approach, embrace a bold, government-wide, 21st century vision of environmental protection…"

To the government's credit, it is quite clear about its intentions: "This report calls for a break from the way that the Ministry of the Environment has been run for many decades and represents a bold new vision for environmental protection," said Premier Harris. "We will begin reviewing the report to determine how to best implement this new vision. We will also forward it along to Justice O'Connor so he can include it in his deliberations in the Walkerton inquiry."

It could be argued that the mandate of the *Managing* report changed from providing the public with assurances about "command-and-control" standards such as clear water- testing protocols and strict enforcement to an exercise in the further devolution of Ministry of Environment governance and operational functions to local governments and the private sector.

The Gallon Environment Letter summarized: "In essence the Report means that the government plans to further embrace voluntary environmental measures and reduce the use of effective use of regulations. And it means that more and more of the power of the Environment Ministry will be eroded and given to municipalities which are ill-prepared to absorb the new responsibilities. It means that some of the Ministry's enforcement responsibilities will be handed-off to the very ministries that have been complaining about having to comply with environmental law."[14]

B. Reactions to the Gibbons' report

When the report was released, the Globe and Mail's headline read: "Ontario Government has Failed to Protect People in the Province from Polluted Air and Contaminated Water, an analysis of the province's Environment Ministry ordered by Premier Mike Harris says"[15] .

"It is apparent to us that Ontario is behind the progress [in environmental protection] in many other jurisdictions and that the gap continues to widen," the *Managing* report warned. It called for a "new approach," saying the environment should be a priority for all ministries and agencies but that they should work in co-operation with the industries being regulated and with the communities affected by pollution. Some environmentalists were highly critical of the study's recommendations, saying they may lead to weaker oversight of pollution rules, shifting of responsibilities to municipalities and more reliance on voluntary measures by businesses.

The Globe and Mail pointed out that the report commented approvingly on jurisdictions that have "turned ministry functions such as enforcing pollution laws and monitoring polluters over to municipalities". But Paul Muldoon, head of the Canadian Environmental Law Association, called the report a disaster and maintained that local governments are not in a financial position to handle these duties. The report also called for more monitoring of pollution-control activities to be left to businesses. Finally, the report called for a temporary increase in funds at the Ministry of Environment for the next three to five years.

Later, the premier confirmed that the report and Judge O'Connor's recommendations in the Walkerton Inquiry would guide the government in developing new policies for protecting the environment, and in revamping the Environment Ministry. He also conceded that the report did find fault with his government's record. "It's critical, I think, in suggesting that for the last couple of decades our Ministry of the Environment, including under our watch, has still been stuck in this old mould and had not progressed." But he argued that the report was not critical of cuts in the Ministry. "There's not a recommendation on the amount of money. There's not a recommendation on staffing levels," he said.

The only reference in the report to the severe budget cuts inflicted upon the Ministry was this indirect statement: "We saw an organization under considerable management and operations pressure, as the ministry makes every effort to balance the requirements of the day-to-day running of its business and programs for the public with the extraordinary circumstances of recent months."

What makes the report remarkable is how clearly it articulates a very different vision of environmental protection and of sustainable development for Ontario. After the release of the report, the Office of Implementation was established at the Ministry to implement this untested vision by promoting a program of "compliance assistance" with industrial and agricultural sectors.

Some argue that the goal of this scheme is to achieve private-sector self-regulation without a foundation in the principles of sustainable development. Management plans and self-reporting mechanisms would be used to indicate the performance made in meeting voluntary government "guidelines." These guidelines might become enforceable standards in regulations at some future point or may not. Whether this "new management" approach is environmentally effective and maintains important elements of democratic oversight is discussed below. But first it is important to be clear about the terms used in the report. Only then can we examine the examples subsequently offered by various government ministers to show that integrated compliance will ensure environmental protection and sustainable development.

III. Defining the Terms Used in the Gibbons' Report

Many of the terms used are reviewed in detail in the first appendix to the report entitled *Integrated Compliance Assurance,*[16] written in part by Bob Breeze, P. Eng., Associate Deputy Minister, in the Office of Implementation at the ministry. The compliance paper states that the old command-and-control approach to compliance "cannot effectively deal with today's complex environmental problems" and that while voluntary initiatives may be perceived as "weakening" environmental protection "their effectiveness may be superior in specific circumstances". Importantly, however, no empirical evidence is ever presented to substantiate these claims in either the compliance paper or in the full report.

The report suggests a strategy called "integrated compliance assurance". The features of this arrangement are said to be performance-based, focusing on continuous improvement, and engagement in a cooperative model with industry, government and communities to solve pollution problems. In developing an improved understanding of integrated compliance, the compliance paper dismissed the relevance of positioning "voluntary versus regulatory" instruments at opposite ends of a compliance-policy continuum. Instead, reference is often made to an "integrated approach" to environmental compliance in background information to legislative initiatives.

Compliance assurance is defined as both public and private mechanisms designed to compel firms (and individuals) to conform to formal environmental regulations and informal rules of conduct or social norms. This general definition is refined further in the compliance paper: "Compliance" implies that a government agency has an environmental policy in place, and that **this policy has a measure of authority, including, but not necessarily, the force of law**. It also implies that someone or some enterprise affected by the policy has an obligation (**not necessarily legal**) to take certain actions in certain circumstances" [emphasis added].[17]

A. Voluntary Compliance

The compliance paper was quite clear that integrated compliance assurance does not depend upon the force of law, mandatory standards or enforcement. Rather, the tools to achieve integrated compliance emphasize cooperative and/or abatement agreements as well as compliance assistance. Cooperative agreements are defined as "agreements that require parties to meet binding information disclosure and performance outcomes in return for government incentives." Compliance assistance means offering information and government incentives to the affected parties to allow them to build the "capacity of regulated entities to comply with environmental laws". In Table 2-1 of the compliance paper, the government is clear that compliance assistance features voluntary codes of practice and government guidelines, but not enforceable legal standards.

B. Delegation of Powers

Complementary to integrated assurance is the delegation of provincial government powers: "In some cases, the responsibilities to implement can be delegated to other levels of government, to the regulated community or to a third party; or, they can be shared. A successful compliance strategy would include elements of each."[18] The government's goal of maximum corporate flexibility is also clear: "While the goal is to maximize compliance flexibility for all parties, the basic premise is that the end determines the appropriate means".

But the compliance paper appears to have confused the means with the ends of environmental protection. It has placed an inappropriate reliance upon Dutch models of cooperative agreements with a mature industry that works within a well-grounded social consensus and environmental framework. This necessary precondition to a so-called integrated approach to compliance assurance is absent in Ontario. We review the Dutch approach to sustainable development below.

1. Weak Enforcement

The framework for environmental governance that the government intends to implement in Ontario is clearly illustrated in the compliance paper. It features the delegation of government authority to the private sector, with flexible and voluntary approaches to standard setting, as codified in cooperative agreements and management plans to assure compliance. Indeed the compliance paper dismisses the value and effectiveness of legally binding policy instruments and enforceable standards by offering assurances that: "regulatory enforcement can never be excised from an integrated compliance strategy".

In the end, however, another paper discussing environmental governance (see discussion next section) and appended to the Gibbons' report concedes, "a credible threat to use enforcement is part of the government's bargaining power to make voluntary initiatives work. Absent the plausible threat of enforcement, cooperative approaches to achieving compliance seem to have only limited effect on regulated entities.[19]" (Crow et al 2000). **But given the state of the Ministry of Environment's reduced role in policy development, monitoring and data analysis as well as field operational capacity, the assurance of bottom-line government enforcement seems hollow.** This remaining element of public control may be important, however, in crafting legal and judicial responses to the purported delegation of authority to an unaccountable private sector to manage public goods such as clean air and water.

The compliance paper concludes that " In most leading jurisdictions the commitment to change and innovation is very strong and that the adoption of integrated compliance is rapidly accelerat-

ing". The paper defines the phrase "integrated compliance" to mean voluntary compliance agreements, with non-binding government guidelines. The governance paper that follows this compliance paper, however, contradicts the claim that environmental policy innovation necessary follows from a delegated approach to environmental governance.

There is some acknowledgement in the compliance paper of the public interests involved: "The attendant risks of choosing one instrument over another are not easily quantifiable. Responding to the values of equity, inclusiveness, and full disclosure complicates the situation. That is why it has taken a decade or more for certain non-enforcement tools to become accepted and implemented."

IV, Environmental Governance Models

After having set out the government's approach to integrated compliance, the task of another background paper to the Gibbons' report entitled: *Review of Governance Models in Environmental Management*[20] was to highlight flexible models of environmental governance for the consideration of the Ontario government. According to interviews with the Office of Implementation, the Dutch Covenants, cooperative government-industry agreements governing environmental compliance, inspired how Ontario's new integrated approach to environmental management would be implemented. **The conceptual framework sought for Ontario from the Dutch model would see integrated compliance assurance implemented by private-sector self-regulation through cooperative agreements, replacing the need for enforceable legal standards.** The government would provide compliance assistance in the form of government guidelines, that industrial and agricultural sectors could redefine in management plans, and in the form of incentives, including facilitated engagement with non-governmental organizations (NGOs) for public outreach purposes.

A. Identifying environment-related governance functions

Having set out the governance goals, the task turned to identifying the remaining environment-related government functions for distribution purposes. Environmental-protection responsibilities were said to comprise a continuum of functions that range from basic scientific research on environmental quality and ecosystems to the enforcement of specific regulations. In most cases, the environmental agencies examined tended to reserve the "upstream" functions in this continuum to themselves (i.e., research, standard-setting, policy development) and were more willing to delegate "downstream" activities such as point-source monitoring, inspections and enforcement.

The governance paper specifically looked for examples where governments had delegated maximum flexibility and responsibilities to industry. It noted the European public administration trend to create industry-wide cooperative agreements. A 1997 study by the European Environmental Agency estimates that there are more than 300 cooperation agreements in place, two-thirds of which are in Germany and the Netherlands.[21]

The paper recognized that: "Everywhere, delegation reflects national constitutional principles and political culture: where environmental powers are delegated to local authorities, it is likely that other powers are delegated as well. In other words, environmental governance seems to follow established trends rather than be precedent-setting."[22]

It was observed that the Netherlands share the **policy development** function between orders of government, with the senior agency setting the overall policy direction and regional or provincial authorities having the discretion to adapt it to their priorities. In Canada, environmental jurisdiction is also shared, with the provinces addressing some areas (industrial licensing), the federal government addressing other areas (ocean dumping, export and import of hazardous waste, etc.), and the responsibility for some areas being shared (pollution prevention, toxic substances, air emissions, etc.).

B. Dutch Approach to Sustainable Development

The Netherlands' model of environmental governance is based on the country's federal government setting long-term environmental quality goals,

transferring resources to local governments and negotiating sectoral agreements with industry for how to achieve these goals. It is important to note that the Netherlands established a politically accountable policy-development process and an effective operational infrastructure before it ventured into this phase of sustainable development driven by cooperative agreements with industrial sectors. These covenants implement pre-existing and clearly articulated and financed government policy; they do not define it. **Unlike the current legislative trend in Ontario, the Dutch did not delegate standard setting and compliance assurance to industry before expectations were codified in enforceable standards with effective compliance measures. While the end of sustainable development may include cooperation agreements, they are not the means to get there.**

1. Standard Setting

The governance paper to the Gibbons' Report recognized that **standard setting** is often a function of the national environmental agency or a reflection of an overarching set of national environmental standards that may include formal input from lower levels of government. The Dutch government is legally required to produce a National Environmental Policy Plan (NEPP) every four years that provides a vision, identifies problems, sets objectives and targets, defines the roles and responsibilities of decision-makers and outlines how progress will monitored.

Importantly the Netherlands has set the goal of becoming environmentally sustainable within one generation and has gone on to translate this goal into detailed, often numerical, targets and actions that apply at a government-wide level. The framework emphasizes the goal of sustainable development, rather than simply environmental protection, and is developed through an extensive public-consultation process culminating in the adoption of the necessary supporting measures by the parliament. The key feature that distinguishes the Netherlands is that it sets government-wide goals and decision-making processes that bind all government agencies, not just the environment ministry. A separate scientific body, RIVM (National Institute of Health and the Environment) is responsible for ambient and point-source monitoring and state-of-the-environment reporting. The Environment Programme in the Netherlands continuously reports the progress made and gives an overview of plans for the coming four years.

While the NEPP articulates overall environmental-quality goals, the Ministry of Housing, Land-use Planning and the Environment apportions the responsibility for attaining these goals to various sectors. Each designated "target sector" is then given the opportunity to negotiate a long-term covenant describing how they will fulfill their obligations. Where it occurs, delegation of responsibility is rarely unconditional. Dutch Inspectorate for the Environment supervises how local authorities implement environmental policy.

2. Capacity building for local governments

The governance paper in the Gibbons' report also noted that effective delegation to lower levels of government requires a "conducive policy framework" often requiring a transfer of resources. [23] Since the Dutch have a strong commitment to administrative decentralization, a variety of measures are used there to ensure that local governments are staffed and trained to carry out their enforcement responsibilities. National subsidies are offered to local governments to increase their capacity for planning and enforcement and a government fund supports the majority of training program costs for municipal and local governments. Both municipal and provincial governments are organized into associations that represent them in dealings with the national government. The Association of Municipal Governments also maintains a professional staff that assists municipalities in discharging their environmental and other responsibilities.

3. Cooperation agreements with industry

Based upon this solid framework and cultural setting, agreements with individual firms or industry associations are often struck under which these sectors report on their environmental performance. The Dutch have been able to implement sustainable development strategies that have, as a component, cooperative agreements with industry, including some self-regulation. [24] Dutch Covenants do not, however, replace govern-

ment functions that set standards or effectively monitor for compliance.

According to the governance paper, these cooperation agreements are noteworthy on at least two counts: they have created greater policy coherence among government environmental-protection efforts by forcing the relevant ministries of the national government, the provinces and the water boards to agree to a common agenda; amd they provide industry with considerable latitude for how to achieve environmental-protection objectives. Although the objectives are non-negotiable, **the latitude gives industry groups an effective say in regulatory design**. No other jurisdiction has gone as far as the Netherlands in the implementation of this model, but according to the paper, there were examples of negotiated agreements in most of the jurisdictions reviewed.

C. Corporate codes of conduct and self-certification

In addition to the Dutch approach, the governance paper examined several jurisdictions in which industry associations have developed mandatory codes of conduct for their members. These codes can cover a range of issues, including environmental performance, public reporting and community consultation. In Canada, examples of these codes include the Canadian Chemical Producers' Association Responsible Care program (also applied in 40 other countries). Although such codes do not represent an explicit delegation of government responsibilities to the private sector, the governance paper noted: **"they may pre-empt government regulation and encourage environmental protection authorities to focus their resources elsewhere. Where this is the case "they may represent de facto standard-setting".**[25]

In addition to codes of conduct, the paper considered forms of corporate **self-certification** as an alternative to direct government standard setting and inspection. The Massachusetts Environmental Results Program (ERP), for example, replaced "traditional command-and-control permits with performance-based standards and whole-facility self-certification". Facilities in three sectors (dry cleaning, photo processing, commercial printing) are required to complete a self-certification checklist annually and submit it to government.

In fact, a full menu of options to further delegate government authority to the private sector was provided in the governance paper. But there were also some contradictions with the compliance paper.

D. United States keeps command-and-control approaches

Unlike the Europeans, and despite the claim in the compliance paper that "integrated compliance assurance" and the voluntary approach is fast becoming the norm, the governance paper found that the majority of U.S. states practice traditional environmental governance and medium-based pollution control regulatory approaches.[26] It was pointed out that this traditional approach must be seen in the context of the American legal system, which imposes a more explicit liability on government agencies than is the case in many other countries. In a related vein, the American legal system also offers less discretion in the way regulatory authorities discharge their mandate.

The governance paper notes that changes in environmental governance are often driven by a broader political agenda that is usually independent of the actual nature of the environmental challenges confronting a particular country. Thus, the level of powers exerted by municipal governments and the creation of semi-autonomous subordinate agencies are matters generally resolved as machinery-of-government issues rather than environmental policy:

"**What little literature exists on this topic suggests that a decentralized structure does not necessarily promote innovation.** According to Rabe (1999)[27], the United States has been much more active and effective in devising innovative approaches in four areas of environmental policy (cross-media permit integration, pollution prevention, disclosure of information and quality and use of environmental-outcome indicators) notwithstanding much greater environmental policy centralization at the federal level. Rabe points out that Canadian provinces have not taken advantage of the extensive bureaucratic discretion often

found in statutes to innovate".

The governance paper concedes that the delegation of environmental responsibilities to lower levels of government and the private sector (eg. self reporting and certification) do not necessarily improve innovation, effectiveness or policy coherence. [28] These models suggest that the balance struck between the centralization and delegation of environmental responsibilities is as much rooted in cultural, constitutional or political considerations as in environmental-management considerations. In this regard, the governance paper concludes that the development of a comprehensive policy framework to guide all decision makers appears particularly valuable in reducing the inconsistent application of policies that is inherent with delegation.

In summary the Managing the Environment report confused the end game of sustainable development with the means to get there. **The benefits of policy coherence, policy and technical innovation and a growing acceptance of voluntary approaches to environmental governance do not appear to be self-evident.** The government's reliance upon the Dutch approach to sustainable development is misplaced given the North American reality. The first step in developing a sustainable development strategy is to identify the greatest needs for change and then develop a social consensus around the objectives for these areas[29].

V. Implementing the *Managing* Report – Examples of Initiatives

Having set out the background to the report, this paper now turns to the examples offered by various government ministers of the value of a new "integrated approach," which is said to assure a "bold, government-wide, 21st-century vision of environmental protection". While the Office of Implementation was at all times cooperative with this review, it was not able to provide any Ontario examples where the delegation of government powers to industry might more effectively promote policy innovation and environmental protection. While the Office of Implementation was unable to provide examples, both the Ministers of Environment and of Agriculture did promote a couple of initiatives they considered consistent with the Managing report.

A. MERCury Switch-Out

According to Hansard reports of the provincial legislature, MPP Raminder Gill (Bramalea-Gore-Malton-Springdale) noted that Pollution Probe had announced Switch-Out, a program to recover mercury from recycled cars. Gill said this program seemed to be "an excellent example of a partnership between government and industry, as recommended by Val Gibbons in her report *Managing the Environment*" report. In response to his question about how this partnership compares to the ideas outlined in the Gibbons' report, Elizabeth Witmer, the Minister of the Environment, replied that such a partnership is "a very good example of what Gibbons talks about: moving forward voluntarily in order to ensure steps are taken in partnership to protect our environment".

The MERC Switch-Out program is intended to reduce the amount of mercury that is emitted into the environment by removing car switches containing mercury before cars are recycled. It is a partnership between Pollution Probe, an environmental group, the Ministry of Environment, Environment Canada, Ontario Power Generation, the Canadian Vehicle Manufactures' Association and the Ontario Automotive Recyclers Association. The Ontario environment minister described the initiative as a pilot project, which, she hoped, would be expanded across the province.

It is true that there are no laws or regulations in place that currently require the removal of mercury from switches when a car is recycled. And it is also true that all would applaud a successful example of voluntary action and partnership to enhance the environment. But where is the evidence of the cost and administrative effectiveness of this program that might make it an effective argument for a move away from command-and-control approaches to environmental protection?

B. Nutrient Management Plans

Another example of improved environmental management based upon the Gibbons' approach is the draft *Nutrient Management Act*. In June

2001 the Ontario government introduced Bill 81, the *Nutrient Management Act 2001* purporting to "set and enforce clear, consistent standards for nutrient management on farms and protect the environment" in the words of Brian Coburn, the Minister of Agriculture, Food and Rural Affairs. New standards were promised for all land-applied materials containing nutrients related to agriculture, including livestock manure, commercial fertilizer, municipal biosolids, seepage and industrial pulp-and-paper sludge.

The proposed law would provide enabling authority for later regulations governing several areas, including: private-sector Nutrient Management Plans, **self certification** of commercial land applicators of materials containing nutrients, **guidelines** setting out distance requirements for manure and biosolids application near wells and waterways, and a database system to record land applications of materials containing nutrients. (It is not known whether this database would be publicly accessible.)

It is significant that the government's announcement of the proposed legislation was said to be "consistent with the Environmental Commissioner's Special Report,[30] responds to the *Managing the Environment Report,* and fits with the government's Smart Growth vision".[31] According to the background in the bill, the " key to this proposed framework would be the Nutrient Management Plan (NMP)," which is said to be "a science-based tool identifying how manure, commercial fertilizers, other nutrients and existing soil fertility are effectively managed in an environmentally responsible manner". Many guidelines and other reference documents were said to have already been developed which could provide a good basis for these standards.

Municipal responsibilities are said to be "clarified" under the bill so that new standards as contained in the nutrient management plans would replace the so-called "patchwork of municipal bylaws regarding nutrient management". Municipalities are reassured of their continued responsibility for land-use planning and building-code approvals. Local advisory committees would be created to promote awareness of the new rules, and mediate local nutrient management non-compliance related issues.

Administratively, the legislation provides for **"alternate delivery"** of the review and approval of NMPs and for the establishment of a registry for NMPs. It would provide the authority to establish fees for any activity undertaken. In the first two years, the Ministry of Environment would co-ordinate the review and approvals of NMPs and other requirements for large operations, while the Ministry of Agriculture would review and approve NMPs for mid-sized livestock operations.

At the first instance, it might appear that the government has finally acknowledged the link between intensive livestock operations, the spreading of vast quantities of manure on land, the contamination of surface and groundwater supplies and the resulting public-health disaster. But upon closer review, **this bill, through its "alternative delivery" mechanisms, delegates fundamentally important governance and standard setting actions for nutrient management directly to factory farms, bypassing the Ministry of Environment and higher local standards contained in municipal by-laws**. Such a delegation of powers by the government to the private sector is exactly what was contemplated in the Managing report.

To its credit, the government did not hide this fact. According to the backgrounder to the bill, Bill 81 **"provides authority for several functions including the review and approval of NMPs, education and training and certification to eventually be managed independently outside government".** [Emphasis added].

But when environmental-governance functions are transferred to the private sector, the province becomes exposed to a number of trade- and investor rights-related challenges.

1. The NAFTA connection to intensive livestock operations[32]

For several years, a paradigm has been emerging in the Ontario livestock sector that espouses consolidation of livestock facilities into large concentrated sites called Intensive Livestock Operations (ILOs). In other jurisdictions throughout the world, ILOs have created significant environmental degradation and societal strife.

Government's need to take a lead in making decisions to effectively direct growth and regulate new development in order to ensure the well-being of the environment and rural communities.

Under the 1994 North American Free Trade Agreement, the parties accelerated tariff concessions for Canadian beef imported by Mexico. For example, Canadian and U.S. beef imported by Mexico receives a rate of "duty free" compared with a 25 percent ad valorum duty on non-NAFTA frozen beef and a 20 percent ad valorum duty on non-NAFTA fresh beef.[33] Thus the NAFTA tariff schedules have encouraged north-south flow in the trade in North American beef. Indeed your hamburger may have been produced in three countries!

The issue of drinking-water contamination and intensive farming has been considered a number of times by NAFTA institutions. The North American Agreement on Environmental Co-operation (NAAEC) provides that citizens can make submissions that a party is failing to effectively enforce its environmental law.[34] In 1997, the Commission for Environmental Cooperation (CEC) received a submission from a number of non-governmental organizations asserting that many livestock operations in the Province of Quebec are operating in violation of various environmental laws and causing significant harm to the environment and human health. The submission was supported in part by government reports, including a 1995-96 report to the National Assembly of Quebec by the Quebec Auditor General. After considering the submission and a response from the Government of Canada, the CEC Secretariat concluded that the development of a factual record was warranted.[35]

The Secretariat can only prepare a factual record if the CEC Council, comprised of representatives from each of the three parties to NAFTA, votes in favour of preparing such a record. The CEC Council voted by a two–thirds vote to instruct the Secretariat *not* to prepare a factual record with respect to the hog-farm submission, indicating the political nature of the submission process.

It is a reality in the agriculture sector today that farming is becoming more and more intensified with more animals being raised by fewer farms. In 1976, 18,622 Ontario farmers raised an average of 103 pigs each. By 1996, 6,777 managed an average of 418 hogs per farm. Two percent of Ontario's hog factories account for nearly one-quarter of the 5.6 million hogs produced each year in the province.[36] With increased trade in the beef and hog industries, these numbers are likely to increase as larger, more efficient farms grab a larger share of the market. These large operations are creating environmental challenges unlike anything that has been previously experienced by the industry, and yet they remain, for the most part, unregulated. [37]

Since 1995, when the current government came to power, the province's involvement in water quality has decreased substantially as it has sought to streamline the public sector, cut "red tape" and increase efficiency. The province's four government water-testing labs were closed and responsibility for water and sewage was pushed down to municipalities. There was no requirement for the private labs to report water-testing findings to the provincial authority. Instead, the provincial government had to rely on the municipalities to inform them of potential water-quality concerns.

2. NAFTA trade and investor challenges

If the Ontario government pursues more schemes to privatize public services, such as water testing and treatment, the current NAFTA rules and emerging commitments under the General Agreement on Trade in Services (GATS) covering over 140 member states, will require national treatment to non-domestic water-service providers and investors, providing them with full access to these new markets. [38] Chapter 15 of NAFTA, entitled "Competition Policy, Monopolies and State Enterprises," requires that each party ensure that if government monopolies (defined to include government agencies) are "designated" (which could include redesignated agency partnerships) they must act solely in accordance with commercial considerations in their purchase or sale of the monopoly good or service (Article 1502.3.b)[39] ; and must not discriminate against NAFTA investors (Articles 1502.c and Article 116.b) or service providers (Article 1503.3).

Thus when private-public partnerships evolve in cash-starved jurisdictions, the public sector is

required to strictly apply commercial policy and operating considerations, which constrain the political tradeoffs that might be made between the cheapest price and the highest quality of a service. **Moreover, when foreign investors and service providers gain market access, they may not adequately take into account local water-conservation objectives or ensure public access to clean and affordable drinking water supplies. Public concerns over the commodification and privatization of water and water services are indeed justified.**

3. Ontario introduces the Nutrient Management Act

The Walkerton Inquiry found that the contamination of Walkerton's drinking water by E. coli was related to well contamination by livestock manure.[40] Many other factors, however, have been identified as the root cause: the lack of clear allocation of responsibility for water testing, human error, a disruption to the chain of command in reporting the contamination to the appropriate authorities, MOE budget cuts and the voluntary nature of water-quality guidelines.

The Environment Commissioner, in its special report entitled "The Protection of Ontario's Groundwater and Intensive Farming," summarized the legal and policy framework protecting groundwater as "fragmented and uncoordinated."[41] The commissioner further noted that within the past two years numerous counties and townships across rural Ontario have attempted to deal with the issue of contamination of drinking water by manure through by-laws, but have also urged the provincial government to take action.[42] The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has avoided using regulatory measures to address manure, promoting instead a voluntary approach.[43] Since Walkerton, numerous reports of drinking water E-coli contamination have surfaced in rural Ontario.

Despite the assurances by the Minister of Agriculture that the draft *Nutrient Management Act 2001* will "set and enforce clear, consistent standards for nutrient management on farms and protect the environment," an analysis done by the Sierra Club of Canada found that the Bill in its present form can not be recommended for adoption.[44] First, the definition of "Minister" does not specify which minister, or ultimately which ministry, will be responsible for the administration of the Act. The Sierra Club has consistently stated the view that the Ministry of the Environment (MOE) should be responsible for the enforcement of regulations pertaining to the permitting and operation of Intensive Livestock Operations. This assignment of responsibility to the MOE should be made express in the act since the ability of OMAFRA to effectively regulate the agricultural industry that it is also entrusted with promoting and developing places it in a conflict of interest.

Secondly, this bill enables regulations to set out specific standards at some later point in time, if at all.[45] Rather than this approach, the act should state that such regulations constitute a minimum standard and that municipalities are able to impose more stringent requirements reflective of the environmental and/or socioecomic peculiarities of the municipal jurisdiction.

Most importantly, the Sierra Club takes issue with the delegation of powers relating to the review and approval of nutrient management plans to individuals and corporations found in Section 55 of the bill[46]. These plans can supersede municipal bylaws containing standards higher than those contained in private-sector management plans or even possible future regulations.[47] It is appropriate to include wording in this section that expresses the right of municipalities to pass bylaws whose measures exceed those of this act, where the purpose is to reflect local concerns and objectives.

Many municipalities have been forced by the lack of provincial leadership to develop bylaws and strategies to govern the location and operation of ILOs. The imposition of private-sector plans and minimal provincial regulations that supersede well-thought-out and widely supported local solutions will not result in the greatest protection of water resources and the environment at large and certainly will not bring any peace to the conflict over the imposition of large ILOs on communities.

However, given the government's expressed preference for an "integrated approach" that

features industry self-regulation, environmental management will be almost exclusively based on private-sector Nutrient Management Plans (NMP). The problem with this approach to environmental governance is that while NMPs are an appropriate tool for use in matching manure application rates to crop requirements, **NMPs are not capable of preventing ground- and surface-water degradation. NMPs do not account for the pathogenic organisms contained in animal manures, nor do they adequately assess the ultimate destination of the nitrogen faction of animal manures. NMPs do not assess the subsurface geology and subsequent vulnerability of underlying water aquifers.**

While the Ontario government makes much of the fact that a new cabinet-level environmental policy committee has been established in response to the Gibbons' report, the lead for the design and implementation of the act appears to continue to rest with the Ministry of Agriculture. Despite interviews with Office of Implementation in the MOE, no information was available on the MOE's actual role in this critical piece of legislation; any questions were instead referred to the Ministry of Agriculture. The disconnect between these ministries undermines the claim that all relevant ministries cooperatively manage the environment at cabinet level.

C. Self-screening for air emission monitoring and reporting

In a May 2, 2001 statement, Environment Minister Elizabeth Witmer said that when the Ministry of the Environment accepted the Managing report "it signalled a fundamental shift in the way our province will go about protecting the environment". As an example of the government's response to the report, the minister assured the Ontario Legislature that the MOE would establish a comprehensive system of air-emission standards, mandatory monitoring and reporting requirements in order to further encourage emission reductions in Ontario.[48] The minister added that in response to the *Managing the Environment Report*, the government would establish a comprehensive environmental monitoring and reporting strategy that included the capacity to conduct inspections.

In May 2001, Ontario's Ministry of the Environment introduced O. Reg. 127/01, a new regulation for air monitoring and reporting. After January 1, 2002, this regulation will affect large and small facilities from many sectors, which fall within the ministry's screening criteria and reporting thresholds for reporting. The total list of pollutants with an air-reporting requirement was increased to 358, including the full suite of greenhouse gases. This requirement makes the plan one of the most comprehensive in the world. [49]

As described in the air chapter, the key strengths of this regulation pertain to its comprehensiveness, while its weaknesses are its lax reporting requirements, the limited access it provides the public to reporting data, and the fact that the ministry might be ill-prepared to analyze the data reported. [50]

Under the new regulation, facilities have to report their annual output of up to 358 different pollutants, but there are a number of conditions that can dramatically reduce the number of pollutants that a facility must report. First, the owner of a particular facility must ensure that their facility falls into one of the three "classes" of facilities that this regulation is meant to affect. For a firm to be subject to any part of this regulation it must either be an "electricity generator," a "large facility" or a "small facility". If a firm falls into none of these classes, its owners would not be obliged to report its pollutants and O. Reg. 127/01 does not apply.

Furthermore, for the purposes of this regulation the Ontario government has divided the 358 substances into three groups. If, for any given substance emissions are equal to or greater than the threshold, the facility must report their emissions. However, if they are below that threshold, they do not have to disclose any of their emissions of that substance. Because there are so many criteria to determine if a firm needs to report a given substance, facilities that are eligible to report under O. Reg. 127/01 do not necessarily have to report all 358 contaminants on the MOE's list. Instead, they are required to report only those contaminants that self-screening criteria and reporting thresholds require them to include.[51]

In addition to the self-screening monitoring and reporting requirement, the limited number of staff at MOE may impair the ministry's ability to properly deal with the data inflow that O. Reg. 127/01 will provide. This regulation has the potential to provide the MOE with an immense amount of data, and it is very unlikely that the province will be able to delegate a sufficient number of trained personnel to analyze and manipulate it. This is an important issue according to all interviewees contacted, because this data will need to be aggregated at least on a sector-by-sector basis in order to be truly meaningful. An adequate number of staff will also be important in order to ensure compliance with the regulation.

D. Self-screening for environmental assessment of electricity projects

The same integrated approach to environmental management is apparent in the proposed Guideline on the environmental assessment and screening process for new electricity projects[52]. It appears from the proposal that the only mechanism for movement from a Level 1 screening to a more rigorous Level 2 screening is that of a decision taken by the proponent itself. While the guideline suggests that most screenings will probably go on to (at least) Level 2, it is nevertheless widely believed that it is inappropriate that the decision rests solely with the proponent, especially given the significant health and environmental impacts related to the generation of electricity.

Likewise the proposed Water Management Planning Guidelines allow private sector water-management plans for new hydroelectric projects to set out "how waterpower facilities and associated water control structures (i.e. dams on Ontario waterways) are to be designed and operated to balance environmental, social and economic objectives". Yet surely the balance struck and the decision to proceed or not proceed with a proposed hydropower project is a matter for public governance based on clear policy and enforceable standards? These matters of the public interests are *not* the exclusive subject matter of private-sector decision making and authority, based on voluntary government guidelines, which the proponent may or may not accept in management plans.[53]

The public health, environmental, trade-related and litigation risks involved with the government's "New Approach to environmental management" are great. No empirical evidence exists that this governance approach of delegating government authority to the private sector is effective. In fact, the evidence is the opposite. This conclusion is reinforced by the findings of the Walkerton Inquiry.

VI. Environmental Deregulation: The Risks and Legal Consequences

CIELAP engaged in an early analysis of the Ontario government's plan to delegate environmental authority to the private sector in its 1999 case study on the Technical Standards and Safety Authority.[54] Through the *Safety and Consumer Statues Amendments Act* of 1996, responsibility for the administration of a number of safety-related statutes was transferred from the Ministry of Consumer and Commercial Relations to a new private-sector organization, the Technical Standards and Safety Authority (TSSA), comprised mainly of industry representatives. In the chapter on the legal implications of this scheme, the authors questioned the legality of the delegation of powers and speculated that the Canadian Charter of Rights and Freedoms may be deemed to apply to a private-sector entity that performs government functions. A brief review of the paper is provided to demonstrate that an "integrated approach" to environmental compliance that relies upon voluntary standards and reporting along with third-party monitoring and weak government enforcement also poses significant legal risks and instability should a reviewing court strike the scheme down as unconstitutional.

As the TSSA paper made clear, "government agencies in Canada are subject to a series of formal and judicially enforceable legal principles. These range from the fundamental rights and freedoms of Canadians outlined in the Canadian Charter of Rights and Freedoms to specific statutory and common law rules regarding fairness in decision-making. These rules have been built up, in some cases, over the centuries to ensure the just and fair administration of laws, policies and programs by the government. As such, they

represent an important restraint on the arbitrary exercise of power by the state"[55].

These rules and rights were developed on the assumption that public laws would be administered and enforced by governments. The status of these rights where traditional state functions have been transferred to a private corporation is uncertain. Private corporations are generally not subject to the Charter or the statutory and common law requirements regarding fairness and justice in decision-making that apply to the state.[56]

However, over the past few years, the courts have dealt with a number of cases involving the delegation of governmental functions to private organizations. These cases may provide some indication of how the courts might respond to litigation. As one commentator has noted:

"discretionary power (also) allows the court to expand its scope of review where it believes this to be a just result. It has been suggested by some scholars that this will be the inevitable result as the common law is forced to provide new accountability mechanisms to check the current trend to deregulation, privatising and corporatising which may otherwise erode principles established over centuries to protect the public."[57]

There is considerable evidence to suggest that the courts are moving in this direction.

The Canadian Charter of Rights and Freedoms, adopted in 1982, establishes constitutionally entrenched basic rights and freedoms of Canadians in relation to their governments. These rights affect the administration and delivery of government programs in many ways. The Charter, for example, establishes rights to equal treatment and equal benefit of the law, and protection from unreasonable search and seizure. Charter rights, which supersede any legislative authority, are enforceable by the courts and by some administrative tribunals.

The 1998 decision of the Supreme Court of Canada in the case of Eldridge v. British Columbia (Attorney General) applies to this issue.[58] Eldridge dealt specifically with the applicability of the Charter to private organizations carrying functions delegated to them by governments. The matter at issue in Eldridge was whether deaf users of hospital services were discriminated against under section 15(1) of the Charter where there was a failure to provide them with paid interpreters for medical services.

In its decision in Eldridge, the court held that governments cannot evade Charter responsibilities by delegating delivery of their policies and programs, in this case to guarantee access to medical services without charge, to private entities. The court stated that "Just as governments are not permitted to escape Charter scrutiny by entering into commercial contracts or other 'private' arrangements, they should not be allowed to evade their constitutional responsibilities by delegating the implementation of their policies and programs to private entities."[59]

In the Eldridge case, the Charter was held to apply to private entities that implemented a specific government policy or program. The key finding was that the power to make certain determinations was delegated to a subordinate authority and it was the authority's decision that was challenged, not the legislation itself. The court distinguished between private bodies that are subject to the Charter, as a result of having been entrusted by government with the implementation of specific government policies, and other private corporations who derive power from statute simply through the process of incorporation. In its analysis, the court concluded that: "a private entity may be subject to the Charter in respect of certain inherently governmental actions. The factors that might serve to ground a finding that an activity engaged in by a private entity is "governmental" in nature does not readily admit of a priori elucidation."

The court is responding to the growing practice of delegating governmental functions and powers to private entities that are not subject to direct government control. Regulatory negligence suits give the public an avenue to sue government for failing to properly enforce its own rules and regulations. While the government appears to maintain some ultimate responsibility when it delegates authority to lower levels of government

and to the private sector, the question remains where will liability ultimately be found?

A. Regulatory negligence: Suing government or corporations?

Members of the public can sue the government for damages arising from regulatory negligence. Public authorities have a discretionary right and defence in suits to implement enforcement programs on the basis of established public policy and budgetary resources.[60] It is also possible that government may be held liable for the delegation of functions that are performed negligently by the delegate. The British Columbia government, for example, was held liable for the actions of an independent contractor to whom the government's power to inspect and maintain highways was delegated.[61]

The court has relied on a combination of tests regarding the exercise of statutory authority and the "governmental" character of the functions in question to determine the applicability of the Charter, rather than examining whether the functions are carried out by entities in the public or private sector. In other words, the nature of the activity being carried out, rather than on the nature of the actor undertaking the activity, has been the central issue in the determination of the application of the Charter. It is important to note that while the level of control exercised by government over an entity was central in the court's earlier determinations of "governmentalness," in more recent cases, such as Eldridge, it has been much less prominent. This may be a consequence of the court seeing the need to respond to the growing practice of the delegation of governmental functions and powers to private entities that are not subject to direct government control.

In general, the courts have taken the view that governments cannot escape their responsibilities under the Charter and statutory and common law by delegating functions to private organizations. Indeed we may see litigation against both government and industrial sectors, including specific management plans to ensure that neither evade their responsibilities.

VII. Conclusion

The conceptual framework of environmental management laid out for Ontario in the Managing the Environment report would see self-regulation through cooperative agreements with industry replacing enforceable legal standards. Compliance assistance to facilitate this transition is provided by voluntary government guidelines that industrial and agricultural sectors can redefine in management plans and which can override higher provincial and local standards.

The report takes much of its direction from the Dutch approach to sustainable development. However, Dutch covenants with mature industrial sectors implement pre-existing and clearly articulated and financed government policy; they do not define it. Unlike the current legislative trend in Ontario, the Dutch do not delegate standard setting and compliance assurance to industry before expectations based on a social consensus are codified within a solid environmental framework and the effective local capacity to govern has been assured.

The current Ontario government has confused the end game of sustainable development with a means to get there. The benefits of policy coherence, policy and technical innovation and a growing acceptance of voluntary approaches to environmental management do not appear to be self-evident. The risks – human health, environmental, trade-related and constitutional – are simply too great to allow an unaccountable private sector to manage public goods, such as clean air and water. While we recommend the quick implementation of the many positive aspects of the report, including ecological monitoring, greater public transparency and engagement, we suggest further empirical research and public discussion on the more controversial aspects of the Ontario government's approach to environmental management before any further steps are taken.

CHAPTER 2. WATER

I. Introduction

In CIELAP's *Fifth Year Report*, water was "ground-zero" in terms of the impact of the Common Sense Revolution on Ontario's environment. There were deaths and illness in Walkerton from drinking the water. There was fear and anger in rural areas across the province about the increasing impact of animal wastes from intensive livestock operations on rivers, lakes and streams and the agricultural sector's resistance to demands for stricter environmental controls. There was the ongoing issuance by the Ministry of the Environment ("MOE") of permits to take water coupled with an increasing lack of public confidence that the government has any real regulatory handle on removals of surface and groundwater by commercial and industrial interests. Finally, these concerns were played out again at the regional and transboundary level as governments on both sides of the Great Lakes — but particularly Ontario — took turns picking up and dropping the ball on water quality and water quantity issues for the Great Lakes Basin as a whole.

In this year's report, we offer both a recap and update on the situation. This chapter addresses what should be the four key components of sound water policy in Ontario — but currently aren't. First, drinking-water protection. Second, source-water protection (with a primary focus on agriculture). Third, water-conservation measures. Fourth, measures to protect both the water quality and water quantity of the Great Lakes.

II. Drinking Water Protection

A. The new Ontario drinking water regulations

In its *Fifth Year Report*, CIELAP reported on and briefly summarized the contents of the June 2000 Ontario government proposal to promulgate a drinking-water regulation. The proposal followed hard on the heels of the Walkerton calamity of May 2000 in which seven people died and more than 2,300 were taken ill (out of a population of 5,000) from drinking water contaminated by *E. coli* bacteria following heavy rains and flooding.[1] The tragedy triggered not only a public inquiry, discussed below, but also regulatory reform of drinking water protections at a level of intensity, rigour and detail that the province has not seen since the enactment of its first water resources law in the 1950s. The results of the Inquiry likely will trigger further drinking water law reforms.

Given the timing of the publication of the *Fifth Year Report*, CIELAP was able to do little more last year than report that the regulation, Ontario Regulation ("O. Reg.") 459/00, promulgated under the *Ontario Water Resources Act* ("*OWRA*"), had become law in August 2000. This year we provide a more detailed review of the key requirements of the regulations.

The new regulations apply to every water treatment and distribution system in the province that serves more than five private residences[2] and imposes the following obligations on such systems:

- Persons who apply for a waterworks approval must do so in accordance with the Ontario Drinking Water Standards (the former Ontario Drinking Water Objectives updated and now forming a package with the regulations) and the MOE Director of Approvals must "have regard" to the standards when considering an application;[3]

- Owners of water treatment or distribution systems that use groundwater or surface water must ensure that a minimum level of treatment consisting of disinfection, chemical treatment, and chlorination, as the case may be, is maintained,[4] subject to certain exceptions;[5]

- Owners of water treatment or distribution systems must ensure that water sampling and analysis are carried out in accordance with a schedule appended to the regulations and that the analyses are conducted by an accredited laboratory as also set out in the regulations;[6]

- Owners of water treatment or distribution systems must give notice to the Medical Officer of Health (MOH) and the MOE of any exceedance of the drinking water standards; accredited laboratories must do the same when they report an exceedance to an owner;[7]

- Where an exceedance is reported, owners of water treatment and distribution systems must undertake corrective measures set out in a schedule to the regulations and post warning notices in prominent locations so that the information comes to the attention of users of the water system;[8]

- Owners of water treatment or distribution systems must ensure that certain minimum information, such as laboratory water-sampling analyses, approvals orders or directions, are available for inspection by any member of the public during normal business hours;[9]

- Owners of water treatment or distribution systems must make quarterly reports containing certain minimum information, such as measures taken to comply with the regulations and the standards and results of water-sampling analyses during the reporting period, to the MOE Director and must ensure that any person who requests a copy of the report is provided with one; that steps are taken to advise water-system users that the report is available; and, where the system serves more than 10,000 people, ensure that it is available through the Internet;[10]

- Owners of water treatment and distribution systems must ensure that reports written by engineers regarding the status of the systems are prepared for review by MOE by certain dates and every three years thereafter.[11]

These provisions, as far as they go and with some exceptions, are laudable and will improve drinking-water protection in the province. However, in law reform terms, these regulations were developed and became law at an almost unheard of speed — within just three months of the Walkerton tragedy.[12] Under the circumstances, it is not surprising that while some parts of the regulations are a dramatic improvement over the pre-May 2000 situation,[13] other parts should be repealed and replaced as soon as possible.[14]

Moreover, there are two fundamental issues that still need to be addressed. First, what is the capacity of MOE to actually oversee policy development, approval, standard setting, compliance, enforcement or other measures under the existing regime, including the new regulations? Second, what other substantive drinking water reforms are needed and how well placed is MOE to oversee their implementation?

B. The ability of the province to deliver safe drinking water under the current regime

In many respects, the ability of the provincial government to ensure the delivery of safe drinking water to the Ontario public is at the heart of the Walkerton Inquiry. The terms of reference of the Inquiry, established under the *Public Inquiries Act* and headed by Mr. Justice Dennis O'Connor of the Ontario Court of Appeal, required that three matters be investigated:

- The circumstances surrounding the deaths and illnesses experienced in Walkerton at a time when *E. coli* bacteria were found in the town water supply;

- The cause of these events including the effect, if any, of government policies, procedures, and practices; and

- Other relevant matters the Commission considers necessary to ensure the safety of Ontario's drinking water.[15]

From the terms of reference alone, it is apparent that the roles of the government in the specific events at Walkerton and with regard to the future of the province's drinking-water regime as a whole constituted major issues for the Inquiry.

In practice, the Inquiry was divided into two parts to address these terms of reference. Part I of the Inquiry examined the first two questions (called Parts IA and IB). Evidence given by witnesses under oath called by the Commission was heard between October 2000 and July 2001.

Part II of the Inquiry examined the third part of the reference. This part of the Inquiry ran from October 2000 to October 2001. Part II consisted of

the preparation of consultant reports sponsored by the Commission, responses to those reports prepared by Parties to Part II, meetings with the general public, meetings of experts of the Parties to Part II, and public hearings where the Parties made submissions before Commissioner O'Connor.

What emerged from the evidence of both Part I and II of the Inquiry is the extent to which grave concern continues to exist about the ability of the MOE to ensure the delivery of safe drinking water to the Ontario public.

1. The evidence from Part I of the Walkerton Inquiry

The testimony during Parts IA and IB of the Inquiry painted a disturbing picture regarding the ability of the MOE, in the wake of heavy budget and staff cutbacks, to oversee protection of drinking water in the province. Among the revelations were that:

- MOE environmental officers knew of *E. coli* contamination in the Walkerton water system 10 months prior to May 2000 but did not know that *E. coli* could cause death;[16]

- MOE environmental officers never ordered the town's public utility commission to take any action, even though *E. coli* bacteria showed up in Walkerton drinking water numerous times over a five-year period commencing in 1995, because MOE felt that requirements could be met through voluntary compliance;[17]

- Many municipalities were left struggling with the costs of testing their water after the provincial government closed its laboratories in 1996 and privatized water-testing services, according to a MOE district supervisor;[18]

- Expecting large-scale cutbacks in 1995, MOE planned to give up its responsibility for monitoring drinking water; the ministry identified communal water as "non-essential," which meant that drinking water would be left almost entirely to municipalities to look after. MOE would be left only with the responsibility for "source water;"[19]

- Ten months before the tragedy at Walkerton, senior MOE staff noted that the province's inspections of waterworks were being conducted too infrequently and that the program lacked clarity as to which violations of drinking-water objectives would trigger priority action; while annual inspections were recommended, they were scaled back following cutbacks in 1996 and thereafter;[20]

- Throughout the 1990s, internal documents prepared by an assistant deputy minister spelled out the implications of continuing cuts to MOE budgets in terms of "seriously and significantly" impairing MOE's ability to meet statutory obligations;[21]

- Provincial health ministry officials during the 1996-1997 period were so concerned about a breakdown in reporting of contaminated water tests to medical officers of health that they lobbied the environment minister of the day — unsuccessfully — to get the law strengthened;[22]

- In 1996, a government advisory committee recommended that provincial subsidies for water (and sewage) works, subsidies that were viewed as having led to an overbuilding of infrastructure and a failure to conserve water, be terminated. At the same time, the committee also recommended that efforts to set and enforce environmental health standards be improved. The government terminated the subsidies[23] but instead of plowing the savings into MOE's enforcement and oversight efforts also implemented major cuts to MOE's overall budget.

This list merely skims the surface of problems and concerns identified during Parts IA and IB of the Inquiry. Overall, this phase of the Inquiry raised serious concerns about provincial decisions to:
1. close government water-testing laboratories;
2. rely on voluntary compliance; and
3. cutback MOE budgets, staffing, training, and oversight.

2. The evidence from Part II of the Walkerton Inquiry

The evidence in Part II of the Inquiry reinforced that of Part I regarding MOE's ability, or lack thereof, to ensure protection of drinking water in the province. The following is a sampling of

observations, findings and conclusions on this issue contained in the record of Part II of the Inquiry:

A March 2001 Commission-sponsored report, prepared by Nicholas D'Ombrain, on the machinery of government in Ontario for the delivery of safe drinking water, made the following observations about MOE capabilities:

- MOE does not have the mandate to manage drinking water resources on a watershed basis and there is no agreed-upon policy with respect to drinking water with other provincial ministries such as agriculture, municipal affairs, and health;[24]

- MOE problems appear to include budget reductions; staff cuts, and; loss of technical expertise and institutional memory, resulting in declines in inspection, monitoring and enforcement activities;[25]

- Budget cuts have led to MOE staff reductions as well as declines of more than 50 per cent in inspections of municipal water-treatment plants in the past five years;[26]

- Very significant budget cuts to MOE have had adverse consequences for the capacity of the government to fulfill its environmental responsibilities respecting clean drinking water. MOE is not seen as equipped — by way of resources or expertise — to support the government's responsibilities in this area;[27]

- The drinking water policy function rests with MOE, but the ministry does not have the mandate to develop policy beyond its own regulatory/ operational reach (In other words, it cannot direct other ministries to implement policies to protect drinking water);[28]

- Ontario has not adopted policies that would change the way water-treatment facilities are financed. Some large municipalities use full-cost pricing, some use water charges that are more than full-cost as a means of subsidizing their municipal budget, while some recover less than cost and others do not have the data to know whether they are charging too much or too little. Ontario's recent funding efforts to renew infrastructure for smaller municipalities continues a pattern of ad hoc programs that, in the past, have distorted pricing of water services. As long as water users do not pay the real costs of water treatment, facilities will be substandard unless the province is prepared to provide financial assistance (subsidies) comparable to the 1960s. To the extent this is unlikely, the current arrangement is a threat to public health.[29]

A May 2001 submission to the Commission by the Ontario Public Service Employees Union (OPSEU) on behalf of MOE employees who are OPSEU members made a number of similar observations on the weaknesses within the current MOE system:

- There is an expectation that waterworks are to be inspected once a year, but there is a lack of resources to do so. Anticipated new regulations to cover smaller waterworks would likely quadruple MOE's workload within a year;[30]

- Lack of MOE field staff, training, expertise and experience in water management may only get worse. Within the next five years, 50 per cent of the experienced MOE staff in technical support-water will be retiring. Any new staff are being hired on contract rather than on a permanent basis, resulting in their possible loss in two years;[31]

- Wellhead protection and rules with respect thereto are not a priority within MOE regional offices. Reliance for wellhead protection is placed primarily on municipalities. The result is that MOE is most often reactive rather than proactive when dealing with contamination problems;[32]

- There has been fragmentation of the water policy and implementation function within MOE since the reorganization that ended the existence of the Water Resources Branch. Coupled with this is the lack of legislation in areas such as watershed protection;[33]

- Many MOE environmental officers lack training for the waterworks facilities they will inspect. The result is inspections take much longer to perform;[34]

• Lack of MOE ability to focus on the problems of smaller water systems including water distribution, trailer parks, results arising from the new engineer report requirements, and related matters.[35]

A July 2001 Commission-sponsored report on the ability of MOE to deliver drinking water services, prepared by former MOE assistant deputy minister Jim Merritt, came to several similar conclusions:

• Many MOE staff are confused about whether they should take a strong regulatory approach or pursue voluntary compliance;[36]

• There has been a reduction in the level of expertise within MOE. Because of the number of tasks MOE environmental officers and technical staff are now expected to undertake, the skills of officers are often too general to be able to execute detailed inspections of complex operations such as water- treatment facilities;[37]

• Elimination of MOE staff, particularly two major cuts in 1996 and 1997, has had a serious impact on the overall performance of the ministry. Coupled with an increasing number of tasks, the capacity to meet the operational goals of the MOE has been compromised and therefore significantly limits the ministry's capacity to provide comprehensive operational service relating to drinking water in Ontario.[38]

An August 2001 Commission-sponsored report on water suppliers in Ontario, prepared by former United States Environmental Protection Agency (EPA) official Edwin Geldreich, came to similar conclusions regarding MOE, noting that:

• While some water utilities still have good communication with MOE and Medical Officers of Health, others report that communication and in-depth assistance is not like they were in years past. Some of the problems relate to new employees at the MOE who are inexperienced in water-supply problems and cite only references to regulations, providing no in-depth assistance;[39]

• Shifts in responsibilities for both MOE and local MOHs have resulted in a loss of technical support and expertise that water utilities in the province can draw on, particularly the small water systems that cannot afford the cost of private consulting firms and certified laboratories.[40]

These observations and conclusions do not paint a pretty picture about the state of MOE readiness to protect drinking water under existing requirements, let alone under future drinking-water law reform initiatives.

C. Future drinking water reforms?

If a consensus can be said to have emerged from the evidence at the Walkerton Inquiry about what may be needed in future to secure safe drinking water for the Ontario public, it can be said to have focused on the need for a new safe drinking water law. From a variety of Commission consultants[41] to parties representing diverse interests,[42] the theme of the need for new law in this area was sounded early and often. Indeed, even the provincial government has recognized that more initiatives may be necessary. In July 2001, it proposed a special drinking-water regulation applicable to schools, day nurseries, health and social care facilities.[43] While it is impossible to fully predict what the current or some future government may do, it is instructive to attempt to list what might be some of the key components of a future drinking-water law. Drawing on a review of drinking water legislation in other jurisdictions and recommendations made to the Commission during the Inquiry, the following might be said to be key components of sound drinking water law (and how Ontario's existing regime measures up by comparison):

• *Development and promulgation of legally enforceable standards for drinking water contaminants and treatment measures.* Since August 2000, Ontario has had enforceable drinking water standards for certain contaminants comparable to those of leading jurisdictions that have regulated those same contaminants.[44] However, the province still appears to lag in comparison to other jurisdictions on the issue of standards for other parameters including certain industrial and agricultural chemicals and heavy metals;[45]

• *Groundwater protection including requirements to identify and protect sole-source aquifer areas,*

critical aquifer areas within sole-source areas, and wellheads. Ontario law is silent on these matters.[46] (In mid-December 2001, the province passed the *Oak Ridges Moraine Conservation Act*, which it has suggested will eventually include "strong policies" to protect water quality, including wellheads, recharge areas and groundwater in the Oak Ridges Moraine area[47]);

- *Watershed (source water) assessment and protection not otherwise covered in respect of the groundwater matters referred to above.* Ontario law is silent on source-water assessment, protection, planning, and implementation.[48] Whether the new *Oak Ridges Moraine Conservation Act* changes this situation remains to be seen;

- *Operator training and certification*. The existing regulations (O. Reg. 435/93) on training and certification of operators require amendment and better enforcement;[49]

- *Consumer and public access to information*. The new drinking water regulation (O. Reg. 459/00) has improved the situation, but may require further amendment in future;[50]

- *Demonstration by water utilities of technical, financial and managerial capacity to meet drinking-water standards*. This is not a requirement of Ontario law. The engineers' reports required under the new drinking water regulation may assist in demonstrating gaps in these areas, but a province-wide gap analysis study may be necessary to determine the nature and extent of technical, financial, and managerial problems across the province and the measures and costs necessary to remedy the situation;[51]

- *Financial regime, such as a revolving-loan fund, consistent with full-cost recovery to sustain the above program elements, including renewal of drinking-water infrastructure*. This is not a requirement of Ontario law. Depending on the findings of the gap analysis suggested above in terms of the costs of infrastructure renewal, the federal government may have a role in assisting the province in establishing and maintaining such a financial regime.[52] In late December 2001, the province introduced the *Sustainable Water and Sewage Systems Act, 2001* that would require primarily municipalities to undertake a full accounting of the costs associated with delivering water and sewer services and to develop plans for moving to full cost recovery.[53]

These elements represent some of the fundamental components of new drinking water legislation that the Commission was asked to consider recommending to the province. It could fairly be said that considerable consensus developed across the spectrum of interests appearing before the Commission around these elements. On other matters, there was less consensus and more doubt. These matters included:

1. whether the public should have a legally enforceable right to safe drinking water;
2. whether water treatment facilities should remain largely in public hands;
3. what to do about smaller water systems; and
4. how aggressively to regulate agricultural sources of water pollution.

As noted above, the province introduced or passed in late 2001 certain legislative or regulatory measures in areas such as smaller waterworks systems, protection of the Oak Ridges Moraine and sustainable water and sewage systems. These measures will be examined in future CIELAP reports to assess how well they promote sound drinking-water protection goals.

One further area of apparent consensus, but potential problems, is the issue of what entity within the provincial government should take the lead for drinking-water protection in the province. In general, both Commission-sponsored studies[54] and many of the Parties to Part II of the Walkerton Inquiry[55] were of the view that MOE was best placed to be the lead provincial agency on drinking-water matters. However, no one has forgotten that MOE has been badly decimated by budget and staff cuts. Accordingly, without restoration of MOE's budget and staffing levels and a significant infusion of new funding, the ministry could not possibly take on added statutory responsibilities in the drinking-water area at this time.

Indeed, the government itself appears to have reservations about MOE taking on new responsibilities even in an area that has been seen as a traditional ministry responsibility — source-water

protection. This particularly appears to be the case where such a role would place MOE in direct conflict with an industrial sector politically important to the government, such as agriculture. The next part of this chapter explores this issue more closely.

III. Source Water Protection: Focus On Agriculture

A. Animal waste management and water pollution: The rising tide

Even before the tragic events at Walkerton, the government had initiated a review regarding the effects of intensive agricultural operations on water quality in the province and the adequacy of existing policy and legislation. This part of the chapter examines both the impacts of agriculture on source-water quality and the adequacy of the government's proposed legislative response to the problem.

The Walkerton Inquiry generated considerable information regarding the magnitude of potential impacts to source-water quality arising from agricultural activities. Commission-sponsored studies indicated, for example, that non-point sources of water pollution (i.e. overland runoff) are contributing as much as two-thirds of the surface water pollution in waterways of the United States. The largest contributor by far is agricultural activity, including sediment runoff, nutrient loadings and pathogens from livestock.[56]

The problem is so bad in the United States that the EPA, which has been regulating animal feeding operations since the 1970s, recently has proposed new rules to impose greater controls on manure from stockpiles, lagoons, and excessive land application. The agency has concluded that such rules are necessary because otherwise manure from these activities can reach waterways through runoff, erosion, spills, or via groundwater. These discharges, according to the agency, can result in excessive nutrients (nitrogen, phosphorous, and potassium), oxygen-depleting substances, pathogens and other pollutants in water. The resulting contamination can kill fish, cause excess algae growth, harm marine mammals, and contaminate drinking water.[57] In its discussion of the justification for the proposed amendments to the existing rules on animal feeding operations, the EPA cites the Walkerton tragedy as one of the many pieces of evidence it is relying on for proceeding with its regulatory initiative.[58]

Several of the Parties to Part II of the Inquiry also contributed additional understanding of the dimensions of the problem in Ontario. Studies performed for the water-utility parties to the Inquiry noted the work of the International Joint Commission (IJC) in the late 1970s and early 1980s in reporting the impacts on Ontario waterways of agricultural activity. The IJC reported that the Great Lakes Basin as a whole, including central and southwestern Ontario, was being polluted from nutrient runoff from feedlots and other livestock operations, inadequate soil conservation and drainage practices, and improper or excessive fertilizer application, including spreading of manure in winter.[59]

Apparently, the problem has not changed much in the Basin in the last 20 years. In an October 2001 report to the House of Commons, the Commissioner of the Environment and Sustainable Development (CESD) reported that:

> "Livestock operations in Ontario and Quebec generate enough manure to equal the sewage from over 100 million people. And the problem of how to manage it safely is getting worse….
>
> Between 1988 and 1998, a total of 274 manure spills were reported in Ontario. Fifty-three of these spills resulted in fish kills, primarily due to the ammonia in liquid manure….
>
> Many of the basin's rivers in southwestern Ontario and Quebec have concentrations of phosphorus higher than amounts set as provincial objectives for water quality. Seven of the eight watersheds in Canada with the highest counts of coliform and fecal coliform bacteria are in the basin….
>
> [I]norganic nitrogen is accumulating on farmland in the basin. Roughly 70 percent of

> Ontario and Quebec farmland had much higher nitrogen levels in 1996 than in 1981 - and much of it above levels that cause groundwater and surface water contamination….
>
> The misuse of manure and fertilizer on farmland has damaged the ecosystem in the basin….[60]

The Environmental Commissioner of Ontario (ECO) also has weighed in on the subject in a special report to the Ontario legislature. In July 2000, the ECO reported that:

> "…over the past few decades…the size of the average farm [has been] increasing dramatically…[N]ew farms are often high-investment intensive operations, with very large numbers of livestock. Farms with 3,000 or more pigs or 1,200 cattle are increasingly common….As this new form of farming spreads, environmental laws created when small operations were the norm may not address the associated environmental risks that come with more intensive farm operations.
>
> The management of nutrients, particularly from manure, is one of the major sources of environmental risk in agriculture. When manure is incorrectly stored, handled, or spread onto land, it can harm…water….[N]ew large-scale farms produce vast quantities of manure and often do not have correspondingly large areas of farm land. Ontario currently has over 3.4 million hogs…and altogether, they produce as much raw sewage as the province's 10 million people.
>
> Excess manure application can result in runoff to streams or leaching of nutrients from the soil into groundwater. The runoff spurs additional growth of algae and other aquatic plants…which may make water unusable for drinking or swimming…[E]xcess aquatic plant growth reduces oxygen levels in …water, leading to fish-kill incidents. Excess nitrogen (as nitrate) can make groundwater unsafe to drink, particularly for infants and the elderly….Epidemiologists have also recently found that Ontarians living in rural areas with high cattle density have elevated risk for toxic *E. coli* infections. The contamination of drinking water with *E. coli* that killed several residents of Walkerton…in May 2000, is suspected by some experts to be related to livestock manure."[61]

The Ontario government also recognized the nature and extent of the animal-waste management problem before the events at Walkerton. As early as January 2000, the province embarked on a task force review, headed by the parliamentary assistants for the ministers of agriculture and environment, on the effects of intensive agricultural operations on rural areas of the province.[62] Their report to the government in the summer of 2000[63] paved the way for the legislative response developed by the government in the summer of 2001: the *Nutrient Management Act, 2001*.

B. The government's response: The Nutrient Management Act, 2001

In mid-June 2001, the Ontario government, through the Ministry of Agriculture and Rural Affairs (OMAFRA), introduced Bill 81, the *Nutrient Management Act, 2001*.[64] Bill 81 provides enabling authority for the province to introduce standards for the management of nutrients used on lands and to make regulations governing farm animals and lands where nutrients are applied. The regulations may require persons to hold a certificate if they carry out prescribed management practices, to have a licence if they are engaged in the business of applying materials containing nutrients to lands or to obtain an approval for their nutrient-management plans or strategies. Regulations also may govern the location and operation of feedlots and restrict the access of farm animals to water and watercourses.[65] As of December 2001, Bill 81 has been through both second reading and public hearings before a standing committee of the Legislative Assembly.

The introduction of Bill 81 suggests that the province may be prepared to address the problems posed by agricultural impacts on source-water quality and drinking water. However, the findings of the EPA, IJC, the CESD and the ECO on the magnitude of pollution contributed to source waters by agricultural activities, coupled with the

events at Walkerton, are of great concern. The reports and initiatives from these institutions chronicle the extent to which agricultural activities may be a threat to source-water quality in the province. Over 20 years ago, the IJC recommended to governments a four-pronged strategy for solving the problem consisting of the following measures:

1. Land-use measures,
2. regulatory measures,
3. fiscal measures, and
4. educational/voluntary/technical assistance measures.[66]

It is this background that gives us reason to be concerned about the province's proposed solution to the problem under Bill 81. First, with respect to land-use measures, Bill 81 states that provincial regulations on a subject supercede any municipal by-law that addresses the same subject matter.[67] As worded, it is not simply the case that a municipal by-law would be of no force or effect if there were operational conflict between it and a regulation promulgated under Bill 81. Merely addressing the same subject matter as the regulation is sufficient for the by-law to be overridden by the regulation. Thus, Bill 81 has the potential to remove all municipal land-use planning powers under provincial enabling law from addressing concerns with agricultural impacts. This would be the effect of Bill 81 because municipalities make land-use planning decisions under the *Planning Act* through the passage of by-laws. Accordingly, any municipal land-use decision implemented in the normal course through passage of a by-law (e.g. official plan, zoning, etc.) merely by addressing the same subject matter as a regulation promulgated under Bill 81 will be rendered inoperative.

As a result, the province appears to have no land-use strategy planned under Bill 81 for protecting water quality from agricultural activities. Indeed, even though this has been an on-going area of dispute, municipal by-laws have been one of the principal means of addressing agricultural impacts to water quality in recent years.[68] Bill 81, however, appears to be designed specifically to eliminate the municipal role in solving the problem.[69]

Second, there are also no fiscal or technical assistance measures proposed under Bill 81 for dealing with the problem of agricultural wastes.

Finally, it is unclear at this stage what the true nature and effectiveness of the preventive regulatory regime contemplated under Bill 81 will be because the teeth of the law are to be found in the regulations, which have not yet been made public. What we do know at this stage about Bill 81 is troubling:

- It is unclear which ministry (OMAFRA or MOE) will be ultimately responsible for the Act and therefore whether Bill 81 is consistent with the notion of MOE being the lead ministry for drinking-water protection in the province;

- Bill 81 is merely discretionary enabling authority to develop regulations that will be the actual teeth of the law. However, the regulation-making authority under Bill 81 contains no mandatory requirements to develop specific regulatory provisions, no timetable or schedule for when proposed regulations must be produced, or minimum conditions or criteria that must be achieved by the regulated community;

- Bill 81 rarely mentions environmental or water-quality protection - and never mentions drinking water protection - as the objective to be achieved by a particular enabling provision;

- Standards to be developed under Bill 81 would apparently apply initially to only new construction or expansion of large livestock operations. However, it is unclear from the bill what size of operation would constitute a large livestock operation and therefore how many such facilities in the province will actually be subject to the most stringent standards under the new law. OMAFRA background information suggests as an example that a large livestock operation might be 450 livestock units,[70] but it is unclear whether this number will be adopted in the regulations;

- It is not clear what standards would apply to construction of new or expanded smaller livestock operations;

- Existing larger livestock operations would not be subject to the standards for at least three years according to OMAFRA background information;[71]

- Existing smaller operations would not be subject to standards for at least five years, nor is it clear what standards these smaller operations would be subject to, according to OMAFRA background information;[72]

- It is unclear what criteria, if any, other than size would cause a livestock operation to be subject to the most stringent requirements under Bill 81 regulations - whatever those turn out to be. In contrast, under U.S. clean-water law an animal-feeding operation can become subject to the permit requirements applicable to a concentrated animal-feeding operation regardless of the number of animals at the facility if the facility is found to be a "significant contributor of pollution to the waters of the United States";[73]

- Bill 81 is silent on the availability of fiscal measures to assist farmers with compliance or technical assistance in meeting new standards promulgated under the regulations.

In the circumstances, while the introduction of Bill 81 may prove to be a positive step forward it would also appear necessary for the province to go beyond the approach currently outlined in the Bill. For example, it would still appear necessary to address agricultural impacts to water quality through the adoption of the four-pronged approach recommended by the IJC and others.

IV. Water Conservation

A. Permits to take water: The continuing unmanageable outflow

Water conservation is a third facet of water policy that requires serious attention by the province - but isn't getting enough of it. In a January 2001 brief to the Walkerton Inquiry, the Environmental Commissioner of Ontario (ECO) noted that:

> "Water resources are vital to Ontario's environment and ultimately sustain all of the plant, animal and human life in the province. Surface water bodies (e.g. lakes, streams, and rivers) support many important ecosystem functions, such as providing reliable drinking water and habitat for fish, birds and wildlife. In many parts of the province groundwater sustains ecosystems by releasing a constant supply of water into wetlands and by regularly contributing up to 20 per cent of the flow of headwater streams. During dry periods, when surface water flows diminish, groundwater may supply most of the flow of some streams."[74]

In this part of the chapter, we review the situation during the past year regarding potentially excessive water takings, their impacts on the water environment, and proposals to stem the tide of what amounts to "water mining" in this province.

The *Ontario Water Resources Act* (OWRA) is the primary means by which MOE regulates water withdrawals (called water takings) from surface or groundwater supplies in the province. The OWRA requires that most water takings in excess of 50,000 litres a day require a permit from the MOE.[75]

In his January 2001 report, the ECO noted that the impetus for the preparation of his report was the mounting evidence of problems surrounding the permit to take water (PTTW) program that in turn pointed to problems in water-resource management in the province. Problems identified included water shortages, competition for water, on-again off-again moratoriums on water takings by the MOE, lack of information on water-taking trends in the province, and controversial proposals for bulk water removals from the Great Lakes.[76]

According to the ECO the impacts from heavy extractions from water bodies can include:

- Habitat destruction;

- Elevated turbidity (loss of water clarity);

- Reduced diluent capacity (ability to absorb runoff and contaminants); and

- Drought exacerbation.[77]

Because of these potential impacts, the ECO decided in 1999 to review certain aspects of MOE's PTTW program. In the report on the results of his investigation in January 2001, the ECO

pointed out a number of inconsistencies and deficiencies in the PTTW program including:

- Public notices that included inadequate or inaccurate descriptions of PTTW proposals and permits, including ambiguously or incorrectly reported sources of water and inaccurately or inconsistently reported water quantities;

- Inconsistent PTTW evaluations by different MOE regional offices;

- Takings that did not appear to take into account the water quantity available in particular watersheds;

- No clear evidence that MOE consistently applies an ecosystem approach to assessing PTTW applications and issuing permits, even though regulations that have been law since 1999 require that consideration be given to ecosystem function and the public interest when proposed water takings are being reviewed.[78]

These problems, in conjunction with the broad exemptions that already exist under the PTTW program, led the ECO to make certain findings. In particular, he felt that the information generated by the PTTW program could not be relied upon by the government or the public in four critical areas: First, to make informed decisions on PTTW applications; second, to develop a picture of water-taking trends; third, to understand how much water is being taken or is available for use; fourth, to ensure that natural ecosystem functions are protected as required by the 1999 regulations.[79]

These findings, in turn, caused the ECO to identify three major areas of concern with the PTTW program. First, public accountability is threatened because of inaccurate information in the public notices issued under the *Environmental Bill of Rights* (*EBR*) and through the PTTWs themselves. Second, environmental protection is threatened because the MOE is issuing permits for new water takings without access to complete or accurate information on existing water takings. Third, the above problems are promoting conflict in local areas and leading to an increasing number of leave to appeal applications under the *EBR* regarding PTTW applications.[80]

Continuing problems with the PTTW program have been made especially clear in appeal applications filed under the *EBR*. In November 2000, a panel of the Ontario Environmental Appeal Board in *Dillion v. Ontario (Director, Ministry of Environment)* decided that it was not reasonable for an MOE Director of Approvals to issue a PTTW when the first relevant streamflow information would not be available until January 1, 2004. In fact, the proponent's own engineer acknowledged that reliable data might not be available for years. Accordingly, the panel found that the absence of this information created a degree of uncertainty about impacts on the aquatic habitat that raised the possibility of significant harm to the environment.[81] Indeed, the degree of alarm of the panel is captured in the following portion of the reasons for judgment granting leave to appeal to a group of local landowners that challenged the Director's decision to issue the permit:

> " These contradictions: between the time required to obtain reliable streamflow data, and the expectation of meaningful data within a few years (by January 1, 2004); and between the professed confidence in the 1,483 cubic metres per day taking, and the initiation of a field investigation program to obtain the most fundamental information on the aquatic environment only after the Permit is issued — these contradictions do not inspire confidence. In fact, this is the kind of uncertainty about a critical consideration — the very information base of the Director's decision — that dictates precaution in deference to the importance of protection of the environment."[82]

Findings like those of the ECO, and decisions like that of *Dillion*, suggest that notwithstanding recent MOE initiatives in such areas as the funding of groundwater studies, and related initiatives,[83] the province has a long way to go in conserving water in the rivers, lakes, streams, and groundwater of Ontario.

A Non-governmental Response: The CELA Model Water Conservation Law

Concern about the PTTW program and the generally unhappy state of affairs concerning water-quantity protection in the province inspired the Canadian Environmental Law Association (CELA) to propose a solution to the problem. In May 2001, CELA released a model water conservation law designed to provide an integrated approach to water management in the province.[84] The model law addresses issues of water quantity, conservation, source protection, land-use impacts, ecosystem protection, and water takings using an integrated watershed-based approach. Generally, the purposes of the model law are three-fold. First, protect the water regime from activities that negatively impact it, such as diversions, water removals, and development. Second, encourage reductions in water use on a watershed basis by engaging in a variety of water-conservation planning and implementation measures. Third, restore the water regime from past damage.[85]

Central to the CELA model water conservation law is the establishment of water planning boards (WPBs - a conservation authority-municipality mix in that they are organized on a watershed basis but invested with municipal powers). These bodies would be responsible for water-conservation planning and implementation of water-conservation measures on a watershed basis across the province.[86]

The model law is organized around a five-part strategy to conserve water consisting of:

- Protecting Ontario waters from projects, water removals, and development;
- Planning for conservation of Ontario waters;
- Providing for restoration of Ontario waters;
- Establishing a water superfund to pay for the above; and
- Recognizing a role for the public in the process.

Each of these parts is discussed more fully below.

Protect Ontario Waters. This part of the model law is designed to "prevent bad things from happening" by addressing four primary concerns: First, projects, such as water diversions both between watersheds and within a single watershed. The model law would only allow smaller projects within a single watershed if the information submitted to MOE for approval demonstrated that the purposes and objectives of the law could be met. Second, water removals (what the current Ontario law describes as water takings). These would be subject to the same requirements and process as projects. Third, development of the type currently covered by the *Planning Act*. Under this part of the model law, WPBs would be authorized to issue water-impact permits that would be a prerequisite for development. Fourth, development in "special areas." Under this part of the model law, areas that provide unique benefits to the water regime over a wide geographic area (e.g. Oak Ridges Moraine, Niagara Escarpment) would be designated as "special." In these areas development approval will be, as a matter of both law and policy, much more difficult to obtain.[87]

Conserve Ontario Waters. This part of the model law is designed to "make good things happen" by establishing a proactive regime of water-conservation planning and implementation for every watershed in the province. The model law designates WPBs to undertake watershed planning that consists of the following:

1) assessment of water use, demand, and availability in the watershed, and
2) submission of a water-conservation plan to MOE for approval. The plan must achieve the goals and objectives enumerated in the model law such as efficient water use, reduction in per capita, peak daily, monthly and yearly water-consumption rates and related matters.[88]

The plan also must contain certain water-conservation measures designed to achieve the goals and objectives of the law. These measures include several elements. First, water rates that operate on the principle of the more you use the more you pay (subject to protecting certain disadvantaged groups from genuine hardship from rate increases). Second, water-use audits of the public water system to quantify how much water is used and how usage might be reduced. Third, retrofits of fixtures, faucets, showerheads and other facilities to increase efficiency. Fourth, implementation of a system of

continued next page

V. Great Lakes Protection

As we noted at the outset, concerns about drinking water, source water, and water conservation play out again at the regional and transboundary level on both sides of the Great Lakes. In the final part of this year's review on water, we examine two Great Lakes issues where Ontario has tried to polish its image internationally on both water-quantity and water-quality issues.

A. On the water quantity front: Amending the Great Lakes Charter — Annex 2001

On June 18, 2001, the Great Lakes Governors and Premiers of Ontario and Quebec signed the Great Lakes Charter Annex 2001. The Charter Annex is an amendment to the Great Lakes Charter of 1985.[95] The 1985 Charter was designed to address "serious concerns" on both sides of the Great Lakes regarding new or increased diversions and consumptive uses of Great Lakes Basin water resources. The intent of the 1985 Charter is that diversions of Basin water resources not be allowed if, individually or cumulatively, they would have any significant adverse impacts on lake levels, in-basin uses, and the Great Lakes ecosystem.[96] The primary measure established under the 1985 Charter to achieve this goal is the provision of prior notice and consultation with affected

accounting for, detecting, and preventing water loss through leaks. Fifth, enacting water-use regulations and by-laws to restrict non-essential uses of water during drought conditions and other emergency situations.[89]

This part of the model law also requires the private sector to undertake and periodically update water-use audits and implement water-use reduction plans. The latter must be consistent with water-conservation plans discussed above and remedial plans discussed below.[90]

Restore Ontario Waters. This part of the model law imposes obligations on WPBs, (and where necessary the province) to restore the water regime of a watershed where it has been diminished or damaged by past human activities. WPBs must undertake remedial plans that

1) define the nature and extent of the problem and its causes,
2) evaluate existing and alternative measures, and
3) implement, monitor, and evaluate the effectiveness of the measures in restoring water productive capacity, features and functions.[91]

Establish Water Superfund. This part of the model law would establish a "water superfund" to allow WPBs to pay for undertaking the tasks set out under the first three parts of the law (e.g. water conservation planning, remedial planning, implementation, etc.). No statutory text is provided in this part of the model law. Instead, principles are set out for funding a regime of water-conservation planning and related activities. The model law calls for the sources of funding to include those that apply for or retain permits or other approvals from the province for such activities as water-diversion projects, water removals, development, etc. The fund would be financed through a serious of fees on these users, with rebates to those experiencing genuine hardship in paying water bills.[92]

Recognize Public Role. This part of the model law provides for a series of measures recognizing the role of the public in the processes established under the law. These include improvements in public notices and comment periods and rights to hearings, funding, appeals, and access to the courts.[93]

Overall, the CELA model law addresses water sustainability from both a watershed and financial-management perspective. In establishing a fund built from imposing fees on water-taking permits and other approvals, the model law overcomes the common problem of a lack of public resources to implement watershed management, assess water supplies, and improve water databases, all necessary to reform the water-taking process. Thus, the model law constitutes a response to a range of issues from depletion of rural groundwater supplies caused by over-permitting to bulk water removals.[94] In light of the findings of the ECO and others, all of this would seem to be just what the doctor ordered. It remains to be seen whether and, if so, how the patient's current caregiver, the provincial government, will respond.

Great Lakes states and provinces before approval of any major new or increased diversion or consumptive use of the water resources of the Great Lakes Basin. The threshold for notice and consultation is any proposal involving five million gallons (19 million litres) per day. The further intent of the Charter is to seek the consent and concurrence of the other jurisdictions before such approvals are granted.[97]

The Annex 2001 amendment to the Charter establishes a framework for a more binding set of agreements among the Great Lakes states and provinces. It also establishes a series of principles for a new standard for reviewing withdrawals of Great Lakes water and for public involvement in the development of the agreements and how the standard will be implemented.[98]

During development of Annex 2001, Ontario Minister of Natural Resources John Snobelen stated that: "We need to make sure that the cumulative results of small-scale diversions are considered…to ensure no net loss of water from the basin." The minister also confirmed that the Ontario government agrees with the International Joint Commission that the provinces and states in the Great Lakes basin should not "permit any removal of water from the Great Lakes Basin that would endanger the integrity of the basin ecosystem."[99] This is a laudable, if surprising, statement coming from a representative of a government in which a sister ministry, MOE, did the following in the late 1990s: First, MOE issued and then withdrew — following a major public outcry — a permit to an Ontario company to withdraw up to 10 million litres of water per day from Lake Superior for export to Asia.[100] Second, MOE approved water-taking permits for commercial bottlers allowing the removal of 18 billion litres of water per year.[101] Perhaps MNR should investigate MOE.

Environmental groups applauded the draft version of Annex 2001 but also raised concerns about whether diversions under a million gallons per day would get less scrutiny than normal. The groups fear that future threats to the Great Lakes lie not in mega-project diversions but in many smaller projects that would circumvent full regulatory and public review.[102] It is not clear at this stage whether the final version of Annex 2001 will resolve or perpetuate this problem.

B. On the water quality front: The Canada- Ontario Agreement on the Great Lakes Basin Ecosystem

In late September 2001, the governments of Canada and Ontario released for comment a draft 2001 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA). The draft outlines how the two governments will cooperate and coordinate their efforts to restore, protect and conserve the Great Lakes Basin ecosystem. The particulars of this draft and its adequacy will be outlined more fully below. However, the mere existence of a draft is a minor cause for celebration.

1. Pulling the plug

In our *Fifth Year Report*, we noted that the 1994 version of COA expired in March 2000 and left Ontario without a comprehensive cooperative strategy for protecting the Great Lakes ecosystem. The *Fifth Year Report* noted that several months after the expiry of COA, Ontario was still negotiating the renewal of the agreement with the federal government. We also noted reductions in Ontario funding for projects critical to the success of Great Lakes' restoration in recent years.[103] At the time of the COA's expiry, CIELAP wrote to the Ontario Minister of the Environment, then the Hon. Dan Newman, and outlined concerns that COA's specific goals and objectives had not been met. These included:

- restoration of 17 heavily polluted Areas of Concern (AOCs) identified in a 1987 protocol to the Canada-United States Great Lakes Water Quality Agreement (GLWQA) that are wholly located in Ontario or that are shared with the U.S.;

- major reductions in the use, generation and release of persistent toxic substances identified in the agreements; and

- conservation and protection of human and ecosystem health in the Basin.[104]

CIELAP also noted that the situation was likely to worsen without speedy renegotiation and adoption of a new COA containing at least the following elements:

- re-commitment to the basic goals of the GLWQA including the virtual elimination of persistent toxic substances from the Great Lakes, completion of the remediation of the AOCs, and restoration and maintenance of the chemical, physical and biological integrity of the Lakes;

- provisions for achievement of specific targets and benchmarks;

- recognition of the role of municipal governments, conservation authorities and First Nations in the process;

- secure funding for the Remedial Action Plan (RAP) process established under the GLWQA to clean up AOCs; and

- delivery of annual progress reports to the Parliament of Canada, Legislative Assembly of Ontario, the IJC and the public.[105]

In July 2000, the IJC released its 10th biennial report to the Governments of Canada and the United States on the state of water quality in the Great Lakes. The primary portions of the report addressed all the usual suspects that impair Great Lakes water quality, including persistent toxic substances, land-use activities and related matters. The report also addressed programs initiated under the GLWQA to correct these problems. The report pointed out that at a conference in Gary, Indiana, the Great Lakes mayors passed a number of resolutions addressing water-quality concerns, including one declaring the need for the COA to be renewed.[106]

It is arguable that without the existence of the COA, the GLWQA would not likely have achieved many of the successes that have led over the last three decades to improving water quality in the Canadian half of the Great Lakes Basin. The reason, of course, relates to real or imagined jurisdictional restrictions under the *Canadian Constitution* that in practice make it virtually impossible for the federal government to initiate regulatory measures.[107] While the federal government may have been the signatory to the GLWQA, it is actually the province that must undertake the bulk of regulatory measures necessary to meet Canada's GLWQA obligations.

In October 2000, the annual report of the ECO noted the measurable results, milestones, and performance indicators to be met under the 1994 COA[108] and the extent to which they remained unmet under the expired agreement.[109] The ECO also identified four primary reasons why COA targets were not met by the agreed-upon deadlines: First, inadequate funding as a result of provincial budget cuts; second, failure of COA to specify which level of government was accountable for any given action; third, vague targets not connected with measurable performance indicators, and; fourth, inadequate project management and quality control, including ineffective and unhelpful progress reports from the governments.[110] The ECO concluded that a new agreement with clear objectives and timelines was required.[111] The ECO urged the province in developing a successor agreement to COA to include clear public accounting of both accomplishments and shortcomings of the expired COA; a management structure with clear interim benchmarks and mechanisms for mid-course corrections when barriers are encountered; and timely public consultation.[112]

In July 2001, Ontario and Canada were still renegotiating COA, nine months after the release of the ECO report, a year after the resolutions passed by the Great Lakes mayors, and 15 months after the expiry of the 1994 COA.

In early October 2001, in a report to the House of Commons, the CESD also reported on several significant failures under COA. Principle among these was progress on cleaning up AOCs. Of the 17 AOCs identified under the GLWQA that are in or adjacent to Ontario, the CESD found that only one had been cleaned up. Yet under the terms of the 1994 COA that expired in March 2000, nine were to have been cleaned up by the end of the agreement. The CESD also found that the primary vehicle for cleaning up AOCs, the RAP program, suffered during the 1990s due to budget cuts - both provincial and federal. Moreover, lack of

priority-setting, clear direction on what constitutes a good cleanup plan, and indicators of what constitutes a successful cleanup also impeded progress on AOCs. According to the CESD, until these problems are resolved, "we may still have contaminated water, toxic fish, and beach closings."[113]

2. Back from the dead?

Finally, in late September 2001, Ontario and Canada released for public comment a draft 2001 COA. The draft consists of a Framework Agreement and four Annexes that address AOCs, lakewide management, harmful pollutants, and monitoring and information management. Additional Annexes can be negotiated at any time.[114]

The purpose of the 2001 COA is to build on the previous COAs that were designed to restore, protect, and conserve the Great Lakes Basin ecosystem.[115] In this regard, the Framework Agreement establishes 12 principles to guide Ontario and Canada. These principles are accountability, adaptive management, conservation, ecosystem approach, free exchange of ideas, pollution reduction, precautionary principle, prevention, public and stakeholder participation, rehabilitation, science-based Great Lakes' management, and sustainability. The principle of accountability, for example, requires that "the parties must establish clear commitments in relation to agreed-upon goals and objectives for this Agreement and regularly report on progress in relation to the achievement of those commitments."[116]

The Framework Agreement also sets out what is expected under each Annex. Expectations include:

- Five-year societal goals for the Basin that are specific to the environmental issue that is the subject of the Annex;

- Identification of the results the parties will pursue to meet the stated goals;

- Clear articulation of the specific commitments each of the parties will deliver during the period to meet the stated goals and objectives; and

- A management structure that will include timeframes for meeting the results and quantitative and measurable environmental outcomes as well as the names of the parties — government, department, ministry — responsible for specific actions.[117]

The Framework Agreement also commits the parties to conducting a "comprehensive review of the effectiveness" of the 2001 COA after five years. This review must be completed within six months and be subject to public consultation.[118]

Ontario and Canada further commit to providing the resources needed to implement the 2001 COA and the Annexes.[119] As we noted above, a similar commitment under the 1994 COA seems largely to have been observed in the breach.

Finally, the Framework Agreement also establishes a COA Management Committee. This committee is responsible for the following matters: setting priorities, establishing strategies, identifying gaps, approving work plans, coordinating internal annual assessments, evaluating assessment results, conducting on-going evaluations of implementation, facilitating information exchange, producing progress reports, conducting public consultation and coordinating with American agencies and the IJC.[120]

The overall stated intentions identified in the 2001 COA Framework Agreement are laudable. However, where the rubber is truly expected to meet the road in the 2001 COA is in the Annexes. It is precisely in the Annexes, though, where the wheels potentially come off this bus.

The AOC Annex illustrates the problem. The problems start with the preamble, which states, in part, that "RAPs have made considerable progress towards restoring environmental quality in AOCs. However, additional effort and resources are needed to make further advances."[121] This statement makes it seem like the authors have never read the reports of the ECO or the CESD that found that only one AOC had been restored in the 1994-2000 period, when nine of 17 were expected to be cleaned up.

The problems continue under the goals articulated for the AOC Annex. The first goal calls for "restoring environmental quality and beneficial uses in at least two locations" over the next five years "resulting in the removal of the [AOC] designation."[122] If this goal is indeed met by the year 2006, the parties will be one-third of the way to the goal they originally committed themselves to achieving by 2000.[123] At a cleanup rate of two additional AOCs every five years, if that is now the standard established by the new draft agreement, the goal that was to be achieved originally by the year 2000, will now not be reached until the year 2021. That would still leave six AOCs (one wholly in Ontario and five shared with the United States) with no cleanup date identified.

The second goal calls for completing all required actions for RAPs in at least six AOCs in the next five years.[124] The third goal calls for "making progress towards rehabilitation of ecological systems in the remaining AOCs" in the next five years.[125] Considering that the 1994 COA called for removing nine of 17 AOCs from that designation by 2000, it is an interesting question whether the goals articulated for cleaning up AOCs under the draft 2001 COA are adequate.

A further concern with the AOC Annex relates to the results that the parties propose to achieve in addressing continuing sources of pollution affecting AOCs. The approach for reducing pollutants, including nutrients, pathogens and trace contaminants from sewage-treatment plant discharges, combined sewer overflows, urban stormwater and agricultural non-point sources, is entirely qualitative in nature.[126] None of the results proposed are quantitative, specific or measurable, notwithstanding the ostensible commitment to measurable objectives in the draft 2001 COA Framework Agreement.

Overall, the draft 2001 COA is long on vision, but short on the types of specific targets and benchmarks urged for it by the ECO, CESD and CIELAP. Whether the final version of the 2001 COA will be improved appreciably remains to be seen.[127]

VI. Conclusions

In CIELAP's *Fifth Year Report*, we noted that "The tragedy in Walkerton is only one piece of a much larger problem."[128] That continues to be true. Whether it's drinking water, source water, water conservation or the Great Lakes, provincial environmental controls, with some exceptions, have either been in full retreat or have had only a marginal positive impact.

Ontario water law and policy must address these four issues as a whole and the government must rededicate staff, budgetary, legislative and regulatory measures to the tasks necessary to protect, restore, and enhance provincial water resources. As somebody once said: "It's not good enough to be in the boat. You must have an oar in the water and be moving in the right direction. Otherwise, you'll go over the falls."

CHAPTER 3. AIR QUALITY AND MONITORING IN ONTARIO

I. Introduction

Ontario's air has become a health hazard. The Ontario Medical Association has estimated that the poisons released into the province's air contributed to 1,900 premature deaths in 2000[1]. Ontario must bring about considerable change in order to prevent any further deterioration in air quality and further damage to human health. This is a formidable challenge. The toxic substances released into our air come from a wide variety of sources. From the commuter who drives her car to work to the large industrial plant with a billowing smokestack, polluters are diverse and widespread.

Air pollution knows no boundaries and can travel great distances. For example, the Ministry of the Environment (MOE) estimates that almost half of the smog-causing nitrogen oxide and volatile organic compounds in Ontario's air originate from the American Midwest[2]. Therefore, there is no quick-fix solution to this complex problem. The provincial government has used a number of different strategies to address its long-term commitment to improving air quality. Despite these efforts, the levels of dangerous substances, such as nitrogen oxides, carbon monoxide and ozone, in Ontario's air actually increased from 1995 to 1998[3]. This report will analyze some of the reasons for the lack of success of government strategies[4] and make forward-looking recommendations for how these strategies could be improved.

II. Energy Sector Restructuring

The provincial government is in the process of deregulating the energy sector in the hopes that introducing competition into the former monopoly market will help to increase efficiency and increase choice, while helping to improve the environment.[5] However, since power generation is one of the major contributors to climate change and to health hazards such as smog and acid rain, proactive measures must be taken in order to prevent these market changes from compromising Ontario's health and environment.

A. Emissions caps

An essential measure to help protect the health of Ontarians is to set limits on the amount of pollution that is released into the air that they breathe. On March 26, 2001, the government announced that Ontario power generation facilities, primarily owned by Ontario Power Generation (OPG), will face limits on their allowable air pollution emissions from 2002-2007.

There are five major areas of concern with this proposal:

1. The regulation exclude greenhouse gases and many toxic emissions

The caps only cover nitrogen oxides (NO_x) and sulphur dioxide (SO_2), excluding emissions of greenhouse gases, toxins such as mercury and lead, and carcinogenic substances such as arsenic, beryllium, cadmium, chromium and nickel.

2. Sulphur dioxide (SO_2) emissions are allowed to increase

When fully implemented in 2007, the new cap is expected to reduce OPG's SO_2 emissions by 18 per cent. These "tough new emissions limits,"[6] however, will actually allow OPG to increase its SO_2 emissions over 1999 levels during the 2001-2006 period.

3. The caps on NOx are not stringent enough

The caps on smog-causing nitrogen oxides (NO_x) would lead to a 53% decrease in emissions levels by 2007 compared to 1999 levels[7]. However, even this cut will not be enough to meet the commitments made in the 2000 *Ozone Annex to the 1991 Canada-United States Air Quality Agreement* to reduce NOx emissions to 25,000 tonnes per year by 2007. In signing this agreement, Canada agreed to reduce NOx from southern Ontario fossil-fuel power generation facilities by 50% by

the year 2007 and limit total provincial emissions to 39,000 tonnes (measured as NO_2 or approximately 25,000 tonnes measured as NO)[8].

The emissions limits introduced by the provincial government are not stringent enough to ensure that these targets will be met. The province's proposed limit for total electricity-sector emissions of 33,000 tonnes (measured as NO, including allowances and credits) in 2007 is 33% higher than the total level agreed to for Southern Ontario emissions in the Ozone Annex (25,000 tonnes, measured as NO). Considering that the majority of the province's fossil fuel plants – and therefore major sources of electricity-sector NOx emissions – are located in Southern Ontario, this raises questions about how Ontario and Canada will meet their obligations under the *Canadian Environmental Protection Act* in general and under the *Ozone Annex to the 1991 Canada-United States Air Quality Agreement* in particular.

4. There is growing evidence that voluntary caps are ineffective

Furthermore, the effectiveness of imposing voluntary caps is questionable. On June 19, 2001, the Ontario Clean Air Alliance revealed that in 2000, OPG exceeded its voluntary cap on greenhouse-gas emissions by 49%[9]. This translates into a 20% increase in emissions compared to 1999 levels. OPG failed to implement commitments to improve its own energy efficiency and to purchase green energy from independent providers and, consequently, dramatically exceeded the voluntary cap. The OCAA cited this as evidence that voluntary caps are ineffective as facilities can easily break promises and face no penalties.

5. Enforcement of regulation and penalties for non-compliance are unclear

The current proposal does not adequately outline the strategy that the province will use to ensure compliance with the regulation. There is a fair bit of skepticism about the ability of the Ministry of the Environment, which has suffered severe cutbacks in resources and staff, to properly enforce this kind of regulation. Furthermore, MOE has yet to articulate the sorts of penalties, if any, that will be imposed on facilities that exceed the caps. The lack of information and clarity on this element of the regulation calls into question MOE's commitment to effective enforcement of caps on air pollution, even given its general authority to enforce the law under the Environmental Protection Act.

On October 24, 2001, MOE announced a proposal to tighten deadlines for emission reductions. It has promised that province-wide targets for emissions of NOx and SO2 will be moved up from 2015 to 2010 in keeping with the province's commitments under the Canada-Wide Standards.[10]

B. Coal-burning power plants

Coal-burning power plants are among Ontario's worst polluters. In July of 2001, the North American Commission for Environmental Co-operation released data that showed that OPG's large coal-burning power plant in Nanticoke is the worst polluter in Canada in terms of the on-site releases of chemicals[11]. There is a concern that the deregulation of the energy market, which will allow consumers to select energy based on price and/or generator, may lead to an increase in demand for inexpensive power from coal-burning plants. Therefore, there is an urgent need to ensure that air regulations concerning coal-burning power plants are in place before deregulation is fully implemented.

During 2000-2001, the Ontario government found itself involved in three major controversies surrounding coal-burning power plants.

1. Toxic air emissions from coal-burning power plants increased dramatically

Power derived from coal burning creates air emissions that are a threat to health. Emissions from coal plants include acid rain-causing sulphur dioxide, smog-forming nitrogen dioxide, climate change-causing carbon dioxide and nerve toxins such as mercury. During the period 1995-1999, emissions of this toxic chemical soup increased dramatically. In many cases, the levels doubled over the four years[12].

2. Coal plants continue to pollute despite Smog Alert warnings

Coal-burning power plants came under debate again in July when it was discovered that while the Lakeview coal plant near Toronto shuts down

on smog-alert days, the plants in Nanticoke on Lake Erie and in Lambton near Sarnia continue to emit smog-causing pollutants even on days when smog levels across Southwestern Ontario have reached a dangerously high level[13]. Furthermore, the plants in Southwestern Ontario were used to generate power for export to foreign markets. It is both inappropriate and irresponsible for the province to generate electricity for export using coal-burning power plants on smog-alert days. This practice continues despite the government's claim that "During a Smog Alert, the provincial government takes action to reduce smog at its own facilities."[14] (OPG is 100% owned by the Government of Ontario.)

3. Government ambiguous on implementing clean technology at Lakeview coal-burning plant

In March 2001, Minister of the Environment Elizabeth Witmer stated that coal burning at the Lakeview Generating station, the largest source of NO_x pollution in the GTA, would be phased out. Furthermore, she stated that any further electricity generation at the Lakeview station would have to meet the same emissions standards as "efficient natural gas technology". However, in July of 2001, Witmer reversed this decision when she announced she was proposing to allow the plant to use older, less-efficient technology to produce electricity. It was speculated that the Minister reversed this decision in order to protect the value of the Lakeview Plant as it comes up for sale as part of the deregulation of the energy sector (OPG has been ordered to divest generation capacity to encourage greater competition). If the plant's existing technology were rendered obsolete due to new regulations, the value of the facility would drop dramatically. The result of the minister's reversal is that the Lakeview Generating station will continue to emit toxic pollutants at a rate 20 times higher than what had earlier been promised[15].

C. Emissions trading

In March 2001, the government released a discussion paper on a proposed system for emissions trading in the energy sector. The goal of this system is to harness market forces in order to encourage reductions in the emissions of pollutants.

1. Why shift to emissions trading?

Traditional means of regulating pollution emissions are often referred to as "command and control" since they usually involve the government imposing strict controls on volumes of emissions from individual polluters. These controls, whether based on setting minimum requirements for pollution-abatement technology or maximum limits on pollution emission, are usually broad based and apply to all facilities, irrespective of their relative environmental impact. The problems with this form of regulation are said to include:

- Polluting facilities are very diverse, and there is no universal solution that will efficiently reduce their pollution levels at the least cost to all involved. For example, the cost of controlling a given pollutant can vary by a factor of 100 depending on the age and size of plant.[16]
- Imposing a minimum standard of technology or a maximum level of emissions removes the incentive for firms to reduce their emissions beyond the specified limit and fails to provide incentives for the development of new pollution-abatement technology.

An emissions-trading system allows facilities to earn tradable credits in return for reducing their emissions. Other facilities may purchase these credits if they find that this is a more cost-effective solution than abatement. Usually, such a system operates under a total and/or individual caps for the emissions that are being traded. Under this type of system, governments can still control the total aggregate level of emissions by buying up credits on the market and/or by tightening the caps. Facilities, meanwhile, have greater flexibility in deciding how to address their emissions. The result is a relatively low-cost system that also provides incentives for innovation, the development of new abatement technologies and the growth of green power sources such as solar and wind.

However, such a system may lead to serious

environmental disparities. Unless additional measures are taken, larger, more powerful polluters may be able to "pay their way" out of cleaning-up operations, especially compared to smaller facilities with fewer resources. The result can be an overall decrease in emissions but an increase (or continuation of the status quo) in localized pollution around large operations.

2. Ontario's (missing) cap and trade system

Originally, Ontario's system involved imposing caps on emissions on firms or facilities within the fossil-fuel electricity generation sector only. These caps would be lowered over time in an effort to reduce total emissions. It was later decided to also allow facilities in non-capped industries to earn credits for investments or operational measures that resulted in emission decreases. These credits can be sold to facilities operating in the capped sector.

In the capped sector, facilities that have reduced their emissions will also be able to earn credits, which can then be sold to other facilities that have not reduced emissions sufficiently to comply with provincially regulated maximum emission levels[17]. Facilities will be able to purchase emissions credits for nitrogen oxides equivalent to one-third of their total assigned allowances and credits for sulphur dioxide equivalent to 10% of their total assigned allowance.

3. Concerns with the proposal

While in theory, a tradable permit system can achieve positive results, the system outlined in the Ontario discussion paper has some significant flaws.

1. Allowing industries that are not subject to emissions caps to earn and trade credits can lead to more pollution overall

Emissions could actually increase if new sources of emissions are not subject to emissions caps, or if reduction credits could be earned where emissions actually increase[18]. For example, if a firm in a non-capped industry introduced new technology that reduced emissions levels per unit of output, they would receive emission credits that could be sold to facilities in capped industries. However, the lack of caps on the seller of the credits means that this facility could also increase production output to the extent that the total amount of pollution released into the air is the same, if not more. Thus this system would allow the same amount or more air pollutants to be emitted.

2. Many harmful pollutants are not included

The proposal also drew criticism since the caps only deal with emissions of sulphur dioxide and nitrogen oxides, thereby ignoring carbon dioxide, the major greenhouse gas, toxins, such as mercury and lead, and carcinogens, such as arsenic and beryllium. An emissions cap and trading system that only takes a limited number of emissions into account may only serve to shift production from processes that are high in the regulated emissions to processes that, although lower in the regulated emissions, may nonetheless result in high emissions of other, dangerous pollutants.[19]

3. Limited participation for sustainable energy providers

Furthermore, the original proposal excluded many sustainable power providers, such as wind and solar generators, from fully participating in the selling of tradable credits despite the fact that facilities in other industries, such as steel, and chemical manufacturers, are able to earn credits. As the energy market moves towards deregulation, the inability of green power producers to sell credits creates an uneven playing field among competitors and gives an unfair advantage to traditional, more harmful sources of power such as coal-burning facilities. Moreover, this exclusion creates a barrier for green power producers to participate fully in the newly restructured power-generation market.

4. Need for stringent administration may be compromised by lack of resources

A trading system such as the one proposed by the government will require stringent monitoring of a variety of facilities across the entire province. The government must be diligent in ensuring that claimed emission reductions are realized and that facilities are complying with their emissions caps. This will require significant resources, which, given the sharp reduction in Ministry of Environment staff and budgets, may not be available.

On October 24, 2001 the MOE did make some improvements to the emissions-trading system.[20] There is now a new distance limit (no more credit purchases from facilities as far away as Haiti) and a renewable set-aside of 1 kilotonne of NOx for green power producers to sell as credits. But this limit to the participation of green power producers remains controversial. Moreover, while the move toward capping other major industrial emitters was welcomed, much remains unknown about which other sectors will be covered, when they will be covered and what the limits will be.

III. New Regulations on Monitoring and Reporting Air Emissions

On May 1, 2001, MOE's O. Reg. 127/01, a new air monitoring and reporting regulation, came into effect.[21] The regulation requires certain facilities to provide MOE with reports on their emissions of up to 358 pollutants. O. Reg. 127/01 is an extension of O. Reg. 227/00, an air-pollution emissions reporting and monitoring regulation that applied only to Ontario Power Generation. O. Reg 127/01 builds upon the existing regulation by expanding the scope of types of facilities and industries that will be required to monitor their emissions and will also increase the number of pollutants that will be monitored. In its first phase of implementation, both electricity generators and large facilities in other sectors, such as steel and chemical manufacturing, will have to submit reports on up to 358 pollutants. Also, some extremely large facilities will be required to report their quarterly emissions of sulphur dioxide and nitrogen oxides. In the next phase, which commences in January 2002, small industrial facilities that emit high levels of pollution in sectors such as manufacturing will also be required to report.

Although the regulation applies to a wide variety of facilities and pollutants, the screening process does not ensure that all polluters will be reporting all of their emissions. Facilities decide for themselves whether they are covered by the regulation by determining if they fall into one of the applicable categories (power generator, large facility or small facility). If a facility is covered by the regulation, there are further rules and thresholds to determine whether or not they must report on various pollutants.

Because there are so many criteria to determine whether a facility must report a given substance, facilities may not necessarily have to report on all 358 contaminants. Instead, they are required to report only those contaminants that meet screening criteria and reporting thresholds. In fact, based on the various rules and reporting thresholds for the 358 substances, an employee at the Environmental Monitoring and Reporting Branch of MOE suggested that it is unlikely that any facilities in Ontario will end up reporting on all 358 pollutants.[22]

This will mean that the government will only receive air-pollution data when a facility is emitting at levels above a certain threshold. Therefore, MOE will not be getting a complete picture of the cumulative amount of pollution entering the air at any given time. The system also ignores the specific regional impact a pollution source may have. For example, even if a small facility is not emitting enough of a particular pollutant to meet the reporting threshold, the pollution that it is being emitted may still have a negative impact on the surrounding community.

This regulation is, however, very comprehensive and covers more pollutants than the Canadian National Pollution Release Inventory and the widely respected Toxic Release Inventory in the United States[23]. It is a good first step toward achieving some of the other goals set by the province including improving air quality. By casting its net wider, the province will be able to monitor pollutants from a wider variety of sectors and facilities. This will help the province to better understand the sources of air pollution and to level the playing field among facilities that are required to submit reports.

However, the regulation has some faults as well. Its introduction has been somewhat rocky. It was originally scheduled to be implemented on January 1, 2001, but in response to industry's concern that they were not given enough time to adequately prepare for the changes, the implementation date was pushed back to May 2001. This delay will create further complications down the road as 2001 annual data will contain only eight months worth of information, compromising its usefulness in year-to-year emission comparisons.

And despite the delay, there is still concern that the stringent reporting requirements and short implementation time frame will result in inaccurate data collection[24].

Another major problem is that the data gathered from this regulation is not easily accessible to the public. Members of the public can only obtain the data by going in person to a government office. The data should be made more accessible. As long as the data remains tightly held in government offices, the public is denied the right to know about the pollution in their communities and limited in their ability to take action against polluters. When environmental monitoring and reporting systems provide the public with limited access to the relevant data (and without contextual information to understand its impacts on human health), only those firms that are the very worst polluters in any given sector will feel pressure to lower their emissions in order to not be known as the very worst polluter in their sector[25]. Under the current system, the time and energy that would be required for the public to access this information means that the pressure placed on industries to lower their emissions will likely be minimal.

The ministry itself may also face challenges in fully leveraging the potential of the information that can be derived from the data. Once O. Reg. 127/01 is fully implemented, MOE expects to receive 4-5,000 responses resulting in an immense amount of data[26]. Due to the downsizing that has occurred in the provincial government in recent years, it is reasonable to suspect that comprehensive data analysis will be a difficult task for the Environmental Monitoring and Reporting Branch. (In 1994, the ministry had an operating budget of over $400 million; by 2000 this number had decreased to $158 million. At the same time, staff had been reduced from 6,639 in 1995 to 3,380 in 2000[27].) Thorough analysis of this data will be essential for the success of other government programs, including the proposed emissions-trading system.

An adequate number of staff will also be important to ensure compliance with the regulation. As indicated previously, the Ontario government has created a compliance strategy for dealing with facilities that do not cooperate with O. Reg. 127/01 and to ensure that facilities are accurate in making their calculations. It has yet to make the details of this compliance strategy public. This compliance strategy cannot be properly administered without an appropriate number of trained personnel.

IV. Anti-Smog Action Plan

In June of 1996, Ontario's Ministry of Environment and Energy, which is now the Ministry of the Environment, launched the Ontario Smog Plan, aimed at reducing emissions that contribute to smog. (The plan was subsequently renamed the Anti-Smog Action Plan.) In October 2000, the government released a four-year progress report. While the report does highlight some tangible results, overall it tends to exaggerate the amount of progress made and fails to mention several shortcomings.

A. Reductions in emissions

One of the greatest concerns about the Anti-Smog Action Plan (ASAP) is the inconsistent and sometimes misleading methods of reporting progress in reducing emissions. For example, in the August 2000 Anti-Smog Action Plan Progress Report, the provincial government claims to have made significant inroads in the reduction of emissions of smog-causing pollutants such as nitrogen oxide and volatile organic compounds. This was claimed to be proof of progress toward its goal of reducing these two pollutants by 45% of 1990 emission levels by the year 2015, as outlined in the 1998 Anti-Smog Action Plan.[28]

However, many of the emission reductions trumpeted in the report actually occurred before the inception of the plan (i.e. pre 1996).[29] While progress may have been made in the mid '90s, in the years since, progress seems to have stalled. This finding is supported by a study released by the Ontario Medical Association, which found that while emission levels of smog-causing pollutants decreased in the early and mid '90s, emission levels leveled off in the late '90s, indicating a lack of progress in achieving further emission reductions.[30]

Another cause for concern is the way in which the government defines a reduction in emissions. Some of the government's planned reductions will actually allow levels of smog-causing pollutants to increase over time. The Anti-Smog Action Plan uses 1990 as a base year against which reductions in emissions are measured. However, since emissions are generated from industrial and economic activity, they are expected to increase over time as Ontario's population and economy grows. Therefore it is important to examine the planned emission reductions in the context of higher projected future emission levels.

The Ministry of Environment has estimated the level that emissions might reach by the year 2015 if no reductions were made at all. As illustrated in the table below, while existing and readily available reductions might seem to result in a significant percentage decrease from 1990 levels, they are much smaller when compared to 2015 levels. For example, in the iron and steel sector, if emissions are reduced by the proposed eight kilotonnes (kt), this represents a 36% decrease in emissions from 1990 levels. However, if by 2015 no further reductions are made, 27 kt will be emitted by the sector, compared to the 22 kt emitted in 1990 — a 5kt net increase in emissions. Thus the reduction commitments to date barely keep up with the projected growth in polluting emissions and fail to achieve the government's stated goal of achieving real reductions in emissions.

Furthermore, one would expect that as the plan developed, the government would be able to identify more "Existing and Readily Available Reduction Commitments" in order to achieve its goal of reducing emissions. However, quite the opposite has occurred. In 1996, the Anti-Smog Action Plan identified "existing and already available" reductions in NOx and VOC emissions totaling 257 and 260 kt. respectively[31]. However, the August 2000 Progress Reports downgrades these targets to 217 - 242 kt and 202 - 228 kt respectively[32]. In other words, instead of finding more ways to reduce emissions, the "Action Plan" seems to have found more reasons why not to.

B. Inaction on levels of particulate emissions

Particulates are one of the key components of smog. They are tiny particles in the air composed of several different substances, including sulphates, nitrates and organic compounds. Of particular concern are those that are 10 microns or

Table 1: MOE's Sectoral NOx Emission Reduction Scenarios in 1996

Industrial Sector	1990 Emissions (kt)	Gross 2015 Emissions (kt) (no reductions after '90)	Existing and Readily Available Reduction Commitments	Projected Changes in Emissions
Ontario Hydro (OPG)	77	77	19	19 kt reduction
Copper and Nickel	53	82	43	14 kt reduction
Iron and Steel	22	35	8	5 kt increase
Petroleum Refining	14	22	3	5 kt increase
Pulp and Paper	9	17	-	8 kt increase
Cement and Concrete	10	16	3	3 kt increase
Other Industrial	46	79	8	25 kt increase
Residential Fuel Combustion	16	15	-	1 kt reduction
Commercial and Institutional	8	13	3	2 kt increase
Miscellaneous	3	4	-	1 kt increase
Transportation	401	573	170	2 kt increase
Total	659	933	257	17 kt increase

Source: Wellner, John "A critical analysis of progress reported by Ontario's Anti-Smog Action Plan Partnership" October 2000

less in diameter as these are easily inhaled. High levels of airborne particles can lead to inflammation of the lungs resulting in a reduction of lung capacity and an increased rate of hospitalization[33].

A 1998 Anti-Smog Action Plan Steering Committee report promised the development of a particulate-emissions reduction strategy to be completed by the end of 1998. According to the report: "In consultation with all partners, the IP/RP work group is developing a strategy to be completed by 1998. The strategy will establish a schedule to set targets and reductions of particulate emissions and its precursors."[34]

This plan was to be finalized by 2000 and enter the implementation phase by 2001[35]. However, as of July 2001, this plan was still incomplete. The only demonstrable action that the provincial government claims to have taken regarding particulate matter, according to the 2000 progress report, is providing expertise in the development of Canada-Wide standards on particulate and ozone levels[36]. Unfortunately, the most recent data on particulate levels is from 1998, which does not allow for meaningful analysis of the impact of government initiatives to reduce particulate matter. Data up to 1998 indicates that while levels did decline in the early 1990s, progress halted in 1995 and since that point particulate levels have remained the same or have slightly increased[37].

C. Public awareness and engagement

Throughout 2000-2001, the government utilized a number of channels in order to promote the need for action on reducing air pollution. The smog-alert system informs people when smog levels rise to dangerously high levels. These alerts helped to raise awareness of the issue of air quality, especially in the summer of 2001 during which Ontario experienced a record high number of smog-alert days. The smog alerts were complemented by a government website —www.airqualityontario.com — which offers data on current smog levels in communities across Ontario.

However, data on pollutant emissions and ambient levels are still difficult for the public to access, particularly up-to-date data on particulate levels. The government should strive to make this data more easily available to the public.

Furthermore, some of the information on the government air-quality website is misleading. For example, when explaining the air-quality index (AQI), which measures levels of harmful pollutants in the air, such as ozone and nitrogen oxides, the website states "If the AQI value is below 32, the air quality is good and there are no known health effects for the majority of the population"[38]. However, this directly contradicts statements made by the medical community. Specifically, a report produced by the Ontario Medical Association states "We now know not only the serious health effects of ozone for the people of Ontario; we also know these effects are happening at lower levels of ozone than previously thought. In fact, scientists can measure damaging effects on lung functioning at very low levels of ozone. There is no "safe" level of ozone and therefore there is no "threshold" for ozone."[39]

D. Reducing transboundary air pollution

In the Anti-Smog Action Plan report, the province outlines the steps that it has taken to help to reduce the inflow of air pollution from the United States. One of the positive steps that it took was defending a U.S. Environmental Protection Agency (EPA) order that requires 22 states to develop State Implementation Plans to reduce air emissions. The order was being challenged by a coalition of states and major polluters. Ontario intervened in favour of the order as it would help to reduce transboundary pollution into Ontario. The U.S. Court of Appeals ruled in favour of the order, which requires reduction measures to be in place by May 2003 and caps to be met by 2007.

The key to reducing transboundary pollution is to pressure the United States to reduce the amount of air pollution that it produces. However, Ontario is endangering transboundary pollution-reduction measures by not keeping pace with U.S. standards on air-pollution emissions. For example, Ontario claims that it is meeting the current standards outlined by the EPA for nitrogen oxides.[40] However, the EPA is currently in the process of tightening these standards by requiring the

use of best-available technology and developing policies that will make significant reductions to emissions levels from 2004-2007.

Furthermore, EPA plans clearly assign emission reductions to particular polluters, thus creating a well-defined plan for reducing air pollution. In contrast, Ontario's Anti-Smog Action Plan does not assign emission reductions to specific sectors, resulting in confusion over who is responsible for which emission reductions and by when.[41] Unless the emission reductions are assigned to parties that will be held accountable for those reductions, there will be no impetus among stakeholders to actually implement the plan's targets.

Instead of working together with the U.S. to develop solutions to this complex problem, Ontario has adopted a "wait and see" approach by stating that it will meet or exceed future EPA emissions standards.[42] Until Ontario demonstrates genuine commitment to reducing air pollution by making aggressive reductions in its own emissions, it will lack the integrity necessary to have any influence on transboundary pollution that stems from the U.S.

IV. Conclusion and Recommendations

From June 2000 to June 2001, the provincial approach to air quality has been well intentioned, though lacking in substance and action. The province should be applauded for some of its positive initiatives, such as increasing public awareness of air pollution through the smog-alert warning system. On the other hand, the province must be condemned for continuing to operate some of Canada's worst polluting facilities, including the worst in the country, the Nanticoke coal-burning power plant. Overall, the province seems to be taking an active stance against air pollution through the introduction of a number of new regulations aimed at monitoring and capping air-pollution emissions as well as introducing a possible means of controlling them using market forces. However, these regulations have been disappointing in their lack of scope and ability to result in significant improvements in air quality. In order to address the shortcomings of the province's air-quality strategy as well as some of the particular weak spots of the new regulations, CIELAP offers the following recommendations.

1. The new emissions monitoring and reporting regulation, O. reg 227, offers the promise of providing richer information and better understanding of air pollution in Ontario. In order to fully realize this potential, CIELAP recommends the following:

   a. In order to ensure that the information stemming from this regulation is fully leveraged, the government should establish a publicly accessible website, such as the Environmental Registry of the Ontario Environmental Bill of Rights, that will allow citizens to access data and any reports or analysis of the data.

   b. To prevent further delay in implementation of the emissions-monitoring regulation, the government should improve consultations with industry and other stakeholders.

   c. In order to encourage higher rates of compliance, the province should work with the federal government to harmonize this reporting program with the National Pollution Release Inventory. This could help to lower the costs for reporting facilities and make compliance with both regulations easier.

   d. In order to bolster the resources available for the administration, analysis and enforcement of the emissions-monitoring regulation, the provincial government should pursue alternative sources of funding by examining monitoring programs in other jurisdictions and exploring the feasibility of collecting fees from industry.

2. Ontario has introduced regulations that will attempt to cap the amount of certain harmful pollutants emitted into our air. Unfortunately the regulation in its current form is weak. In order to strengthen the regulation, CIELAP recommends the following:

   a. The regulation must be expanded to include more pollutants, including greenhouse gases, toxic chemicals and carcinogens.

b. The maximum allowed levels of sulphur dioxide and nitrogen dioxide must be lowered in order to result in a real reduction of sulphur dioxide levels and to achieve compliance with agreements made with the U.S. on nitrogen dioxide levels.

c. The MOE must be provided with adequate resources and personnel to sufficiently administer and enforce this wide-reaching regulation.

d. Penalties for facilities that exceed their caps must be made clearer and must be articulated to the public.

3. Coal burning is one of Ontario's worst contributors to air pollution and climate change. As one of the key sources of smog-producing chemicals, it is a direct threat to Ontarian's health and quality of life. To alleviate this situation Ontario must:

a. Take the necessary steps to phase-out coal-burning power plants and to promote the use of more sustainable sources of energy.

b. Impose strict emission standards on coal-burning power plants in order to ensure that they use technology that minimizes emissions as much as possible.

c. Refrain from operating coal-burning power plants to produce power for export during smog-alert days.

4. The effectiveness of an emissions-trading system is determined largely by the details of design and implementation of the system. The government's most recent proposal for such a system contains a number of flaws in both the design and proposed implementation. In order to remedy these flaws, CIELAP recommends:

a. Facilities in industries that are not restricted by caps on the amount of pollution that they can emit should not be permitted to earn and trade credits.

b. The government should explore further regulation to control other harmful air emissions, such as greenhouse gases, mercury, lead and carcinogens such as arsenic and beryllium.

c. The plan should allow green energy providers, such as wind and solar power generators, to earn and trade emissions credits.

d. The MOE must devote sufficient resources to the implementation of this proposal and be especially diligent in ensuring that claims of emission reductions are accurate and that overall caps are not being exceeded.

e. The MOE must clearly articulate penalties for facilities that breach any of the rules of this trading system and make the details of their compliance strategy available to the public.

5. Despite the rise in smog alerts and poor air quality, the actual progress of the Anti-Smog Action Plan seems to have stalled in recent years. In order to get this plan back on track, CIELAP recommends the following:

a. When reporting its progress to the public, MOE must eliminate rhetoric and offer clear, accurate reports on the progress of ASAP since its inception in 1996.

b. In order to determine the true volume of emissions that need to be reduced, the MOE must take economic and industrial growth and the resulting growth in emissions into account.

c. All partners involved in ASAP must commit to increasing, not decreasing, the amount of "existing and readily available reduction commitments". Until they do so, ASAP's progress will remain stalled.

d. The ASAP members must fulfill their promise of developing and implementing a comprehensive particulate emissions reduction strategy.

e. The MOE must strive to make more smog-related information accessible to the public, such as up-to-date data on particulate levels.

The MOE must also correct misleading statements on its airqualityontario.com website.

f. In order to address the problem of transboundary pollution from the U.S., the province must tighten up its own air-quality regulations to meet or exceed the standards set in the U.S.

CHAPTER 4. HAZARDOUS WASTES AND BROWNFIELDS

I. Overview: The Hazardous Wastes-Brownfields Connection

Hazardous wastes and brownfields. As Old Blue Eyes might have crooned, "You [mostly] can't have one without the other." As the generation of hazardous byproducts from industrial production has expanded, the amount of land contaminated with such materials also has increased. Similarly, as the stringency of environmental requirements defining and regulating such materials has increased, so has the amount of contaminated land that has not been reclaimed. Frequently owners, developers, financial institutions and others have abandoned, ignored, turned a blind eye to, or run in fear from such wastelands in favour of new residential, commercial, and industrial development in greener, less-polluted fields outside of major urban population centers.

The result, in today's Ontario as in most other state and provincial jurisdictions in North America, has been a negative environmental and health legacy of increasing problems in managing hazardous wastes, reclaiming contaminated lands and failing to control urban sprawl.

In this chapter, CIELAP examines the Common Sense Revolution's initiatives of the last year that sought to turn the tide on the unhappy hazardous waste-brownfields cycle. The news on this front is not black, white or green, but a muddy shade of gray.

II. Hazardous Wastes

A. The problem: Ontario's open-door policy on hazardous wastes

In CIELAP's *Fifth Year Report* on Ontario's Environment and the Common Sense Revolution we noted that since 1994, the generation of hazardous waste within Ontario had increased sharply.[1]

In this year's review, CIELAP updates the situation in Ontario by considering four matters. First, we examine recent, somewhat contradictory, findings of the Canadian government on the generation and import of hazardous waste in Ontario. Second, we compare the Canadian government's findings to American reports — authored in part by CIELAP — on hazardous waste shipments to Ontario. Third, we review the ongoing problem of the concentration of hazardous waste disposal in the Sarnia area. Fourth, we consider the aftermath of government investigations into the alleged dumping of hazardous wastes at the Taro Landfill.

1. The (conflicting) views of the federal government?

Evaluating the position of the Government of Canada on the generation of hazardous wastes in Ontario is somewhat difficult. The difficulty arises, in part, from the fact that in the period since the publication of CIELAP's *Fifth Year Report*, the federal government has issued two reports on hazardous waste generation that come to virtually opposite conclusions on the state of affairs in Ontario. A further future difficulty surrounds the fact that on March 31, 2001, the definition of what constitutes hazardous wastes was changed under Ontario law. As a result, relying on the federal government's analyses may be a problem during this transitional period. Nonetheless, the federal government findings may contribute at least a snapshot of understanding of the hazardous waste situation in Ontario; albeit a blurry one.

The Government of Canada issued the first report in July 2000. At that time, federal Environment Minister David Anderson released 1999 Canadian statistics on transboundary movements of hazardous waste showing that, nationally, there had been an 18 percent increase in imported hazardous waste for disposal purposes primarily from the United States from 1998 to 1999. Mr. Anderson stated that the "continuing rise in imports of hazardous waste is raising questions of safety and responsibility. Canada does not want to

become a pollution haven."[2] Indeed, the federal statistics for Ontario for this period were even more startling. They showed that imports for disposal in the province over the period increased by 38 percent. Generally, the report attributed the rate of increase in waste imports to Canada to higher American waste pre-treatment standards, stricter environmental-liability obligations, and the weakness of the Canadian dollar.[3]

In contrast, the second report issued by the federal government in August 2001 painted an almost rosy picture of the hazardous waste situation for the period 1999 to 2000. Releasing statistics on the transboundary movement of hazardous wastes for 2000, Environment Canada reported a 29 percent reduction in imports nationally and a 32 percent reduction in imports for landfilling. The numbers for Ontario were even more pronounced: a 44 percent reduction in imports for landfilling in one year.[4] While recognizing that "there is still more work to be done" Minister Anderson stated that: "Progress is being made on establishing an environmentally sound management regime for the management of hazardous waste in Canada."[5]

While it is always fun to play with numbers, is this the same country Minister Anderson said only one year earlier was in danger of becoming a "pollution haven?" What accounts for such a dramatic change in just one year when nothing notable occurred on the legal or regulatory reform front in Ontario for the 2000 reporting period? A more likely factor in the reduction of hazardous waste imports to Ontario during this period was the beginnings of a downturn in the American economy and a corresponding reduction in hazardous waste generation in the United States. In any event, it is a dicey proposition to attempt to discern trends on the basis of only one or two years of data.

2. The view from south of the border

The problem with the approach and conclusions reached by the Canadian government are highlighted by research on hazardous wastes conducted in the United States. In May 2001, a report released in Texas using Environment Canada data for a much longer timeframe (the nine-year period from 1991 to 1999) revealed a 500 percent increase in hazardous waste imports to Ontario from the United States, with over one-half of the increase going to Ontario landfills.[6] The report, co-authored by CIELAP, concluded that the dramatic growth in American hazardous waste exports to Ontario was a function of differences in regulatory requirements for hazardous waste disposal, specifically less stringent standards.[7] In addition, the report pointed to a general demise in the regulatory environment in the province arising from the weakening of environmental laws, dramatic declines in enforcement efforts, and significant budget and staff reductions at the Ministry of the Environment implemented by the Conservative government.[8]

Similarly, in September 2001 a trade association of American companies demanded that the United States Environmental Protection Agency (EPA) block hazardous waste exports to Canada by businesses seeking to evade tough U.S. regulatory standards. The trade association asked the EPA to not allow American companies shipping dangerous wastes to Canada to avoid complying with costly rules at home that required that these wastes be treated before disposal.[9] (The United States does not allow disposal of untreated hazardous waste in chemical landfills, whereas Ontario does allow such disposal.)

While governments talked about developing countrywide, if not North American-wide, standards for hazardous waste disposal to deal with the problem of Canada and, particularly Ontario, receiving increasing quantities of American hazardous wastes,[10] editorialists in the past year continued to condemn the lack of concrete action on the hazardous waste front.[11]

3. The Sarnia area — hazardous waste central

Similar concerns and themes emerge when we examine the picture in Sarnia, Ont., an area that could easily be known as hazardous waste central. During the past year, a draft report prepared for Environment Canada concluded that lax provincial environmental policies that allow disposal of untreated toxic waste make Canada, and particularly the Sarnia area, a magnet for American hazardous waste. The study also found that tough rules in the United States that require

that hazardous wastes be treated before being landfilled encourage many companies to move their waste north to Canada for cheap disposal. Moreover, according to the report 30 percent of American hazardous waste shipped to Canada in 1998 ended up being disposed of or burned in the Sarnia area landfill-incinerator complex owned by Safety-Kleen. According to the report, a significant factor in the decision of generators of American hazardous waste to use the Sarnia area facility was lower disposal costs.[12]

Despite the concerns of Sarnia area residents[13] and calls by area legislators for a ban on the import of American hazardous waste, the Ministry of the Environment believes the situation is improving.[14] MOE optimism appears to be based on the reduced quantity of hazardous waste imported in 2000, which Environment Canada also appears to take some comfort from. The question, however, is whether this optimism is justified or misplaced.

4. *Taro: Aftermath of a hazardous waste scare or gone with the wind?*

Finally, another recent incident that also contributed to pressure for Ontario hazardous waste law reforms appeared to come to a comparatively happy ending in 2001. In CIELAP's *Fifth Year Report*, we reported on allegations in the media that the Taro East Landfill in the Hamilton area was receiving waste that, under the laws of the State of Michigan and the United States, would be deemed hazardous. However, because of differences in Ontario laws defining and characterizing the same waste, such material could legally be disposed of in Ontario as non-hazardous waste. Due to a public and media outcry, the MOE announced a six-point plan of action to address some of the weaknesses in Ontario's laws defining hazardous waste.[15] The results of this law-reform initiative are discussed more fully below.

However, the question remained as to what was the environmental condition of the Taro East Landfill itself? One of the six points of the action plan called for the establishment of an independent expert panel to review the potential for any long-term environmental effects as a result of waste deposited at the Taro East Landfill. Reporting in October 2000, the panel made a number of significant findings. First, the panel accepted the conclusions of MOE investigators that the owners of the landfill had not broken any Ontario laws. Second, the panel noted that there was no evidence that significant or widespread dumping of hazardous wastes had occurred at the site. Third, the panel did not identify any obvious risks to human or ecosystem health posed by the landfill.[16]

The ironic result of this scare is that a site deemed to be in compliance with Ontario hazardous-waste law, became a significant spur to reforming for the first time in 15 years how Ontario defines hazardous waste.

B. The solution: Ontario's new rules for defining hazardous wastes?

When there are many things wrong with a jurisdiction's legal and regulatory regime, it is always best to begin at the beginning with proposed law reforms. In the case of the Ontario Government's six-point action plan on hazardous wastes, the provincial effort focused on how such wastes were defined under Ontario law and the need to make these definitions more compatible with American law. The question that remains, however, is whether a faulty waste definition was all that was wrong with Ontario hazardous waste law and, if it was not, what will follow this initial reform effort? The answer is that there is more wrong than mere definitions, but what the government's next steps will be remains largely unknown.

1. *Origins of the regulatory initiative*

CIELAP's *Fifth Year Report* and the above discussion make it clear that the impetus for the development and implementation of regulatory amendments defining hazardous wastes was at least twofold. First, there was the trend to increasing hazardous waste imports to Ontario for disposal. Second, there was the question of particular waste shipments that, while regarded as hazardous wastes under American law, were not so regarded under Ontario law.[17] To combat these problems, Ontario, following a period of public notice and comment in 2000 on proposed amendments to

provincial hazardous waste regulations, brought into force on March 31, 2001 three key changes to defining hazardous wastes in the province. What these changes do and what they should do was the subject of a CIELAP report released at the time the regulations came into force earlier this year.[18] A summary of the report's findings is discussed below.

2. *What the regulations do*

The regulatory amendments that came into force at the end of March 2001 are designed to improve the identification of hazardous wastes in the province in three ways. First, the regulations adopted a new test procedure for determining when waste is leachate toxic.[19] Second, they adopted a rule for when waste derived from hazardous waste remains hazardous waste,[20] subject to certain exceptions.[21] Third, they adopted lists of what constitutes hazardous wastes under American law so as to harmonize better with American regulatory requirements.[22] Overall, adoption by Ontario of these three changes improves provincial law by correcting key discrepancies that have existed between Ontario and American hazardous waste laws for over a decade. These discrepancies have contributed to making Ontario a magnet for increased hazardous waste imports for disposal and have led to concerns about how these wastes were being managed in the province.

3. *What the regulations should do*

Despite the above changes, a number of key issues remain outstanding regarding each of these reforms and the overall adequacy of hazardous waste regulation in the province. The following summary is based on CIELAP's recent review of the new regulations.[23]

a. *Leachate toxic waste*

The first issue of concern involves the new leachate toxic waste test known as the Toxicity Characteristic Leaching Procedure (TCLP). The new Ontario requirements may allow an MOE director to substitute an "equivalent test method" for the TCLP, but do not set criteria for the application of such a substitute approach. In contrast, American law does not permit substitution of another test method for the TCLP except by petitioning for an amendment to the regulations. Similarly, proposed new federal law reforms in Canada do not authorize any departure from the use of the TCLP. Accordingly, this new discrepancy between Ontario and federal requirements in Canada and the United States could pose problems in future for the transboundary and interprovincial movement of leachate toxic waste.

A further issue related to leachate toxic waste is the number of chemical contaminant parameters that the TCLP applies to as compared to under American law. The new Ontario amendments apply to 88 chemicals, while American regulations apply to 40 chemicals. Accordingly, Ontario believes that its requirements respecting leachate toxic waste now are more than twice as stringent as those of the United States.

However, there are some potential problems with this conclusion. First, as noted above, the Ontario amendments authorize substitution of an "equivalent test method" for the TCLP, whereas American law, the *Resource Conservation and Recovery Act (RCRA)*, permits no such substitution, except by regulatory amendment.

Second, threshold concentrations for determining that a contaminant in waste makes the waste leachate toxic are sometimes higher and sometimes lower for certain chemicals under the Ontario regulations than under American law. As a result, where the Ontario thresholds are higher, the same waste would need a higher concentration of the contaminant to be regarded as hazardous waste under Ontario law than under *RCRA*.

Third, at least one chemical (alachlor) was deleted from the final version of the Ontario amendments because there was no "published health based rationale" to justify retention of the contaminant in the amendments. However, the federal minister of agriculture banned the use of alachlor in Canada in the 1980s because it represented "an unacceptable risk of harm to public health." Because the United States continues to approve the use of alachlor in agriculture, there would appear to be the potential for problems to arise in future to the extent that alachlor-contami-

nated waste is not regulated as leachate toxic waste in either country and is subject to transboundary movement.

b. Derived from rule

Ontario's adoption of a derived-from rule still leaves the following issues of concern. First, the province's reform exempts four broad hazardous waste streams from the rule and therefore from being regarded in law as hazardous waste in Ontario. While this initiative may be intended to encourage recycling in a manner similar to requirements in the United States, the American waste-class exemptions from the derived-from rule operate in a far stricter regulatory context than Ontario. Therefore, Ontario's adoption of the *RCRA* exemptions without adoption of a comparably strict regulatory framework may be problematic.

Second, Ontario's derived-from rule also authorizes site-specific exceptions from the application of the rule if the waste is produced in accordance with a certificate issued by the MOE stating that the waste does not have characteristics similar to characteristics of the hazardous waste "from which it was derived." This provision appears less rigorous than Ontario's existing hazardous waste de-listing procedure (the procedure that permits removal of a hazardous waste from a schedule of such wastes and therefore makes it no longer subject to being regulated as a hazardous waste under Ontario law). The provision also appears less rigorous than American regulations that require a de-listing petitioner to demonstrate that the waste does not meet any of the criteria for which it was listed or have other attributes that might result in the waste being hazardous.

Third, Ontario's new derived-from and mixture rules also are not intended to apply to wastes generated from contaminated-site decommissioning; a potentially significant omission in the context of future cleanups of brownfields. The Ontario rationale for this position is that these "remediation wastes" are not waste streams created during industrial or manufacturing operations and often pose little actual health or environmental threat (although there is the possibility they could be considered as leachate toxic waste using the TCLP). The MOE policy decision not to regulate contaminated soils as listed hazardous waste appears, at a minimum, to be contrary to American law (in particular the "contained in policy" regulating contaminated soil, groundwater, and sediments and rules regulating debris as hazardous wastes).

Fourth, the new Ontario regulations also make it clear that the derived-from rule applies to listed but not characteristic hazardous wastes. That is, waste derived from a characteristic hazardous waste is not deemed to be hazardous waste under Ontario law. In contrast, American law requires that the waste must be shown to no longer have characteristics that would require that it continue to be regulated as hazardous waste and, even then, such waste still may be subject to "land ban" requirements (i.e. required to be treated before disposal).

c. Harmonized hazardous waste lists

There are three issues of concern regarding harmonized hazardous waste lists. The new Ontario regulations are not retroactive, which, from a fairness perspective, is appropriate where facilities accepted American hazardous waste as non-hazardous waste in Ontario when it was legal to do so. However, there is the potential for future environmental problems with these sites. If a non-hazardous waste facility in Ontario has been receiving any of the up to 129 waste streams that the United States has been regulating as hazardous wastes for over a decade (but Ontario has not), there are potential concerns about whether the Ontario landfills were ever adequately designed or built to handle the waste they received. The new Ontario amendments do not address what should be done to ensure that the province and the public will not face future problems arising from the past disposal of hazardous wastes at these facilities.

Second, some sites that in the past have received certain waste as non-hazardous waste will no longer be allowed to do so because the materials would now be regarded as hazardous waste under the new Ontario amendments. However, these facilities could continue to do so in future if they obtain a site-specific certificate exception from the

derived-from rule from MOE. The standards for obtaining an amendment to a certificate are not set out in the new regulations and may well be less stringent than existing MOE requirements for de-listing wastes as hazardous.

Finally, it is unclear the extent to which *Basel Convention* and OECD lists of hazardous wastes — often relied on by Canada — are reflected in lists under *RCRA,* which the province is now more closely tied to as a matter of law as a result of the recent regulatory amendments.

d. Future reforms necessary

While reforming Ontario law on hazardous waste definition and identification is important, it is just the first step. For Ontario to avoid a continued rapid increase in hazardous waste imports, the province will need to pursue a more comprehensive approach to hazardous waste regulatory reform. Adoption of a variety of measures may be necessary. These should include:

- rigorous standards for the treatment, storage and disposal of hazardous wastes;
- restrictions on the land disposal of untreated hazardous waste;
- comprehensive liability for hazardous waste mismanagement;
- fees on industrial generators of hazardous wastes based on the per-tonne generation of such wastes; these fees could encourage waste reduction and be used for a variety of regulatory activities including remediation of contaminated or abandoned sites; and
- incentives, if not requirements, to reduce hazardous waste generation.

Initiatives such as these would also help Canada meet its domestic legal and international obligations on control of the transboundary movement of hazardous wastes and the protection of the Great Lakes.

Late in December 2001, the province announced a number of new initiatives. These included:

1. adoption of amendments to the primary provincial waste regulation, scheduled to go into effect on January 1, 2002, which would require all hazardous waste generators to register their hazardous wastes annually rather than the current one-time-only basis,[24] and require hazardous waste generators to pay annual fees to cover MOE costs related to the management of hazardous wastes in the province;[25]

2. release of a discussion document on possible pre-treatment requirements for hazardous wastes prior to land disposal;[26] and

3. draft regulations that would phase-out the use of hospital incinerators, set requirements for the handling, transportation, and treatment of biomedical waste, and require the destruction of 99,000 tonnes of PCBs currently in storage.[27]

These initiatives will be discussed more fully in future by CIELAP. Suffice to say at this time that, in principle, these initiatives are welcome additions to hazardous waste regulation in the province. Nonetheless, there may be potential problems with several of the initiatives that will become law in early 2002.

In the case of the annual generator registration requirement, the amendments do not specify the contents of annual reports that must be filed with MOE, such as total waste quantities generated and on-site and off-site disposal by quantity of these materials. Nor is such information apparently intended to be publicly available.[28]

In the case of the cost-recovery initiative, it is unclear whether the $12 million in fees to be collected annually under this regime for MOE's management and tracking of hazardous wastes[29] will have a material effect on reducing hazardous waste generation. Nor is it clear whether the funds generated through annual fees under this program will be available, let alone sufficient, to address remediation of contaminated or abandoned sites.[30] This appears especially to be the case if funds generated under the program are reduced proportionately through future MOE budget cuts.

Taking the first step of defining hazardous wastes is important. However, it is unclear what Ontario's long-term strategy for hazardous waste management is in the province. The failure to develop a comprehensive strategy may create problems for the province in future as it tries to deal with the back-end of the hazardous waste problem — contaminated lands.

III. Brownfields

A. The nature and sources of the problem

Brownfields are abandoned, idled or under-used industrial and commercial lands where expansion or redevelopment of infrastructure is complicated by real or perceived environmental contamination.[31] They exist, in part, because of environmental laws that impose liability on owners, operators or persons in charge, management, or controllers of a source of contamination. The barriers created by these laws can include:

1. Concern about future environmental liabilities;
2. Uncertainties about cleanup costs;
3. Complexity and delay in undertaking remedial action;
4. Difficulty in obtaining financing;
5. Concern regarding the enforceability of contracts assigning or allocating environmental liabilities.
6. Lack of data on the environmental condition of land;
7. Absence of clear scientific standards for cleanup; and
8. Existence of orphaned sites (where no responsible parties can be found).

Properties that may become brownfields range from large unused rail yards and steel mills that can occupy hundreds of hectares to the relatively small sites occupied by local dry cleaning shops and corner gas stations.

B. Past initiatives to address the problem

Over the years MOE has undertaken a number of initiatives to address the problems posed by contaminated lands. These initiatives have included development of contaminated-site guidelines to foster redevelopment and negotiation of agreements with lenders to facilitate conducting environmental investigations and otherwise protect the value of real property without attracting environmental liability. In addition, the courts and administrative tribunals have addressed the issue of contaminated lands and the MOE initiatives. On the whole, these initiatives have had mixed success in addressing the problems posed by contaminated lands.

1. Ministry of Environment contaminated site guidelines

Generally, under provincial law MOE has the authority to address any situation where there could be an adverse effect arising from the presence of a contaminant in the environment, including air, land or water. Remediation is legally required under Ontario law when the MOE has issued an order for that purpose.[32]

Since 1989, the MOE has had guidelines for use by property owners involved in cleaning up or redeveloping contaminated property. The latest version of the contaminated-site guidelines dates from 1997.[33] The importance of the guidelines in 2001 and a reason to summarize their content in this year's CIELAP report is that they likely will become enshrined in future brownfields law proposed by the current government. The guidelines provide advice and information to property owners and consultants to use when assessing the environmental condition (e.g. soil or groundwater) of a property when determining whether or not restoration is required, and in determining the kind of restoration needed to allow continued use or reuse of a site. However, the guidelines do not create new legal obligations or otherwise change the legislative powers or regulatory mandate of the MOE. Nonetheless, a landowner that wants to sell, finance or develop contaminated lands has always been well advised to ensure that he or she has met the applicable provisions of the guidelines.[34]

The guidelines identify three approaches for addressing site contamination. The first approach calls for restoring a site to background conditions, the most stringent clean-up levels under the guidelines. These levels were developed by MOE through soil sampling at parks across the province.

The second approach involves use of generic soil and groundwater cleanup criteria designed to protect human health or the environment from adverse effects from exposure to more than 100 different contaminants. The generic soil cleanup criteria are most stringent where the land use is or will be for residential or related purposes and least demanding where the land use is or will be for industrial or commercial purposes. The generic soil cleanup criteria also may be stratified (i.e. may be less stringent the deeper the soil). Different generic groundwater cleanup criteria also are applicable depending on whether the groundwater is intended as a source of drinking water.

The third approach involves use of site-specific assessment criteria for human health and environmental risks. This approach may be substituted for the background and generic approaches where the latter criteria are not adequate or do not exist for particular contaminants on the site.[35]

The guidelines also set out a four-step process of investigation and restoration (site assessment, sampling and analysis, remedial work plan and completion). The guidelines further provide for a mechanism for the property owner and consultants who perform or supervise the site assessment or restoration work to indicate that the work has been completed in accordance with the guidelines. The mechanism, known as a Record of Site Condition (RSC), normally is provided to MOE when a stratified generic approach or certain risk management measures are undertaken.

Use of these approaches creates a need for notification of those who may have a future interest in the restored property. The guidelines provide a mechanism for public notice that may be issued as an MOE order under the *Environmental Protection Act*. The order directs the property owner to register a Certificate of Prohibition under other provisions of the *Environmental Protection Act* on the title of the property. The Certificate of Prohibition requires that information about the restored site be provided to persons who may wish to acquire an interest in the site.[36]

Generally, the guidelines have not been viewed as encouraging owners of contaminated sites or prospective owners, lenders, or developers to voluntarily clean them up because of the threat of exposure to environmental orders or quasi-criminal liability under the *Environmental Protection Act*.[37] At the same time, MOE's role in the process has been primarily advisory, as it largely does not approve, review or "sign-off" on cleanups.[38] Some groups believe the guidelines have essentially created a system of self-regulation.[39] Consequently, there are concerns about the adequacy of the clean-ups performed.

2. Environmental agreements

Development of guidelines was not the only MOE initiative in the 1990s addressing contaminated lands. For a number of years, MOE had been entering into individual agreements with lenders to facilitate the cleanup of contaminated lands and to minimize environmental liability. However, the business and financial communities have had continuing concerns about the potential liability of lenders for cleanup of contaminated property, as well as concerns about inconsistencies in agreements. As a result, in 1993 the MOE created a multi-stakeholder working group to provide advice on ways to achieve greater certainty for lenders.[40]

Reporting in 1995, the working group produced a discussion paper that recommended development of a standard or global agreement between MOE and lenders. The purpose of the global agreement would be to provide lenders with assurances about the scope of their potential environmental liability for all properties on which they hold security and want to realize on that security. Generally, the global agreement was designed to facilitate the ability of lenders to conduct environmental investigations and otherwise protect the value of — and prepare for sale — real property on which they held security without attracting environmental liability or reaping windfall profits.

In practice, however, concerns developed with the global-agreement process as well. Although the global agreement appears to exempt lenders from liability for cleanup, subject to certain exceptions, the global agreement also contained a provision that MOE interpreted as requiring lenders to enter into site-specific supplementary agreements that were more onerous for lenders than the global agreement. For example, MOE used the global agreement to prohibit the management or sale of property unless a lender would agree to provide a reserve fund through a supplementary agreement not otherwise referred to in the global agreement.

Consequently, there was concern in the financial community that the consistency sought by MOE in developing a global agreement applicable to all lenders that would help prevent further abandonment of contaminated sites would be lost if MOE sought more onerous supplementary agreements in each case. This was of particular concern because there was no authority for the agreement process under any statute administered by MOE.

3. The response of the courts and administrative tribunals

Over the years, both the courts and administrative tribunals have had the opportunity to consider issues related to the cleanup of contaminated lands in Ontario. In doing so, these bodies often enunciated principles that clarified the nature and extent of obligations of both owners and lenders and, at the same time, limited MOE authority to act in certain circumstances.

In *Appletex*, the Divisional Court upheld an Environmental Appeal Board decision that applied fairness principles to relieve two owners of a mill from much of their liability under an MOE cleanup order because the owners had not added to the environmental problems on the site.[41] MOE was concerned that the *Appletex* decision, relied on in subsequent cases, could open the door to the creation of more orphaned sites, foster poor environmental practices by owners, lenders, and others and have a chilling effect on MOE's issuance of orders.[42]

In *Re Karge*, a decision also relying on *Appletex*, a panel of the Environmental Appeal Board commented critically on the MOE practice of attempting to compel a lender to enter into a supplementary agreement that is more onerous than the global agreement. The Board was particularly concerned about this practice because the former agreement was not otherwise referred to in the latter and the entire exercise was occurring in the absence of any type of legislative framework authorizing such arrangements.[43]

C. The government's response: Bill 56 — The Brownfields Statute Law Amendment Act, 2001

Given the Conservative government's general antipathy to environmental regulation, one would not have necessarily expected the province to address the subject of cleaning up contaminated lands. Instead, one would have expected the government to leave the problem to the private sector to resolve under existing arrangements, however inadequate. On the other hand, one also could expect that if the province did decide to intervene legislatively on the subject of contaminated lands, the environment might be neither the primary reason for, nor beneficiary of, the initiative.

Both of these observations may be accurate in assessing the government's Bill 56 - the *Brownfields Statute Law Amendment Act, 2001*.[44] Economic, commercial and political factors appear to have driven the decision of the province to address brownfields legislatively. In particular, the City of Toronto's bid for the 2008 Olympic Games would have required cleanup of up to 800 hectares of contaminated Toronto waterfront lands to allow the city's bid to be competitive.[45]

Other Toronto and area redevelopment needs, as well as a desire on the part of the province to reduce the pressure for greenfield development particularly in the Oak Ridges Moraine-905 region, also appear to have been factors in the government's decision to address the brownfields problem.[46] Given the government's increasing political vulnerability in the 905 region, trading away greenfield development for brownfield redevelopment may have looked attractive in the circumstances.

The following review examines the background,

components, opportunities, and limitations of the current Government response to the brownfields dilemma.

1. Preliminary steps: Provincial and municipal task forces on brownfields

The government's first step in developing a strategy for reclaiming brownfields involved establishing a panel of experts to advise it on the subject. The panel was made up of representatives from the legal, financial, real estate, municipal, construction and environmental sectors. Established in September 2000, the panel was charged by the province with providing advice on several matters. These included how to:

1. address liability concerns under the *Environmental Protection Act*;

2. increase municipal-finance incentives under the *Municipal Act* and the *Planning Act*;

3. streamline land-use planning processes under the *Planning Act*, and

4. promote public-private partnerships.[47]

Reporting in November 2000, the panel identified a number of key issues. First, the panel noted that under the *Environmental Protection Act*, liability for contaminated sites is shared widely by the original polluter, subsequent owners, municipalities, lenders and others. The panel noted that the resulting "liability chill" for these groups is the most significant obstacle to the voluntary cleanup and redevelopment of brownfields.

Second, the panel noted that the costs to assess, cleanup and insure brownfields can be high, making brownfields redevelopment less competitive than developing greenfields.

Third, the panel observed that because municipal-site identification and land-use planning approaches vary from municipality to municipality, the result is confusion and uncertainty as to how they should mesh with the MOE's contaminated-site guidelines process.

Fourth, the panel further noted that even when site remediation has been performed, there is uncertainty in confirming that the remediation has been completed according to the MOE's contaminated-site guidelines.[48]

To remedy these and related deficiencies, the panel proposed a three-pronged strategy focusing on reforms respecting environmental liability, financing, and planning matters.

a. Environmental liability

The panel characterized environmental liability as a "cornerstone impediment" to reuse and revitalization of brownfield sites due to the MOE's ability to issue orders and prosecute those associated with contaminated properties. Accordingly, the panel noted that the objective of its recommendations was "to spur redevelopment and productive use of brownfields by clarifying liability rules and assuring the quality of site cleanups."

The panel recommended modifications to the *Environmental Protection Act* and the *Ontario Water Resources Act* to "limit liability for non-polluters such as owners, lenders, municipalities, and others, and provide clarity to polluting owners." As part of these proposals, a non-polluting party would be protected as a matter of law upon taking certain remediation actions and meeting certain environmental standards. As part of this proposal, there would be a clearer, more accountable process of site assessment and cleanup conducted by certified professionals.[49]

The panel urged a number of principles upon the government. These included:

1. maintaining current environmental standards, particularly for sites proposed for residential use;

2. differentiating between polluters and non-polluters, with the former remaining on the hook, but the latter (e.g. non-polluting owners, lenders, and municipalities) obtaining immunity from liability for pre-existing contamination, but not for contamination they themselves create;

3. overriding environmental immunity for owners in emergency situations;

4. encouraging voluntary cleanups by polluters;

5. increasing public reporting on sites and accrediting consultants that supervise remediations;

6. prohibiting the imposing of liability for minor involvement with a contaminated site such as conducting investigations;

7. clarifying processes and criteria for cleanups; and

8. limiting municipal exposure for issuing planning or building approvals and ensuring that the adequacy of cleanups is determined through provincial processes.[50]

Not surprisingly, many of the panel's recommendations would have the effect of enshrining in Ontario law the principles of the MOE's global agreements with lenders and its contaminated-site guidelines.

b. Financing

The panel identified several financial impediments to redevelopment of brownfields. These included uncertain and often prohibitive cleanup costs that make brownfields less attractive to developers than greenfield properties, tax arrears, and federal and provincial liens that limit the ability of purchasers to acquire and redevelop brownfield sites.[51]

Accordingly, the panel recommended generally that governments provide more and better financial tools to encourage remediation and reuse of brownfield properties. In particular, the panel suggested five tools and policies to achieve these goals:

1. enhance municipal tax planning to assist in projects that otherwise are not viable.

2. provide clearer rules on municipal tax arrears forgiveness.

3. lift provincial and federal liens on brownfield properties.

4. provide provincial sales tax and federal goods and service tax rebates on specific costs associated with soil remediation to help level the playing field with greenfields.

5. expand Superbuild and other provincial-funding programs, to address brownfields redevelopment alone and in conjunction with the federal government and the private sector.[52]

Several of these recommendations were highly controversial. In particular, some panel members disagreed with the recommendation to merely level the playing field between brownfield and greenfield development rather than provide a clear financial advantage to brownfield redevelopment, as the latter was viewed as environmentally and socially superior to greenfield development.[53] As well, the panel recommendation to involve the province in active funding of brownfield redevelopment would prove to be a highly controversial issue when it largely disappeared from the government's new brownfields bill.

c. Planning

The panel further found that the land-use planning process frustrates development of brownfields. In the panel's view, current provincial policy seeks to prevent harm from use of contaminated sites, but does not balance this with the need to encourage their cleanup and redevelopment. This, in turn, causes municipalities to treat contaminated lands as a barrier to redevelopment, rather than an opportunity to revitalize such areas.[54]

Accordingly, the panel recommended that provincial-policy statements in the *Planning Act* be introduced to encourage brownfield redevelopment as part of community-improvement initiatives and that municipalities be free to treat the cleanup of contaminated sites under the *Planning Act* as matters for which municipalities can offer development density incentives.[55]

d. The views of municipal interests

While the province was establishing the panel,

municipalities, through the Association of Ontario Municipalities (AMO), set up their own task force to examine the brownfields problem. Reporting in October 2000, the AMO task force identified many of the same problems as the province's expert advisory panel. In particular, the AMO task force identified three matters as representing the greatest obstacles to municipal involvement in redevelopment of brownfields: potential liability; lack of private-sector interest in the majority of brownfields; and the absence of financial support for remediation efforts.[56]

The AMO task force made recommendations respecting three primary matters:

1. environmental responsibility (the need for protection of municipalities from liability, training and certification of site assessment consultants, and provincial responsibility for issuing approvals);

2. financial aspects (municipal ability to offer financial incentives, removal of federal and provincial liens, creation of provincial funding regime for site remediation work), and;

3. process concerns (building of municipal capacity and training, certification of environmental site-assessment consultants, municipal ability to control "as-of-right" developments [i.e. developments where no change in land use is involved], and municipal access to information and right-of-entry).[57]

In addition to its recommendations for revitalizing brownfields, the AMO also urged the province not to lose sight of the longer-term need to prevent the further creation of brownfields; to ensure such sites are not abandoned; and to devote sufficient resources to preventive measures and enforcement.[58]

2. *The government's rationale for Bill 56: Smart Growth — brownfields vs. greenfields*

The province regards Bill 56, its proposed brownfields law, as part of a broader strategy called "Smart Growth." According to the province, smart growth seeks to promote and manage growth in ways that "sustain a strong economy, build strong communities and promote a healthy environment." The role brownfields legislation plays in this strategy is to encourage environmental cleanup of contaminated lands, thereby revitalizing them and surrounding areas, make more efficient use of existing infrastructure like roads, sewers, and schools, and provide an alternative to developing green space and farmland, thereby protecting these areas.[59] This sounds like a "win-win" situation for the urban and rural environment, which should mean much to applaud and little to complain about. But considering the competing factors behind the initiative, we would be remiss in not investigating Bill 56 a little closer. And so we did. The following is what we found.

3. *What Bill 56 proposes: Is this the road to smart growth or the exit ramp?*

Bill 56, introduced for first reading in the Ontario legislature on May 17, 2001 by the Minister of Municipal Affairs and Housing, is described by the government as encouraging the revitalization of contaminated lands. According to government news releases, Bill 56 will promote the cleanup of such sites, protect surface and groundwater resources, improve soil and land quality, help reduce urban sprawl and reduce threats to human health and safety posed by these sites.[60] However, in actual fact, we do not know if these are the purposes of the bill because Bill 56 contains no purpose section setting out explicitly that any of the above are its purposes, goals, requirements or intended outcomes. This is important, because when courts and administrative tribunals seek to enforce the provisions of a law, they prefer to rely on statutory purpose sections as a guide to a law's purpose, rather than on a press release.

In the absence of a purpose section, one has to examine the particulars of individual sections of a law to determine what the overall legal and policy effect of the legislation may or may not be. The absence of a purpose section in Bill 56 absolutely demands such a section-by-section analysis.

Accepting for the moment that the purposes, goals, and objectives of the government's proposal are what the government has stated, what measures does Bill 56 propose to achieve these ends? The Bill appears to focus on five areas of concern:

1. Rules on the assessment and cleanup of contaminated sites.
2. Rules for environmental liability.
3. Quality assurance measures.
4. Planning tools.
5. Financing tools.

Each of these measures is reviewed briefly below.

a. Rules for contaminated site assessment and cleanup

Among the authorities contained in Bill 56 are the following relating to contaminated site assessment and cleanup. The Bill would amend the *Environmental Protection Act* to do three things. First, where necessary, it would make environmental site assessment and cleanup to prescribed standards mandatory where there is a change in land use from industrial/commercial to residential/parkland or other prescribed changes. Second, it would authorize regulations to provide clear rules for site assessment, cleanup and standards for contaminants based on proposed land use (for example, the current cleanup criteria in the MOE's contaminated site guidelines would become regulated standards). Third, it would require the acceptance of a site-specific risk assessment by the MOE as prepared by a certified professional and allow for conditions to be placed on the use of a property.[61]

As noted above, these measures largely adopt the current MOE contaminated-site guideline process. Perhaps the key to the success of these Bill 56 provisions is the extent and frequency with which MOE will be actively involved in the review of a site's assessment, as opposed to passively accepting an assessment prepared by a certified professional retained by the site owner or developer. In other words, do these reforms establish substantive and systematic approval regimes for the cleanup of contaminated lands or are they merely self-regulation by another name? If MOE staff resources are not increased significantly to oversee the process - and Bill 56 does not speak to this issue - then this package of reforms may prove to be largely business as usual.

b. Rules for environmental liability

The Bill also proposes to amend the liability rules under the *Environmental Protection Act* in a number of key respects. First, Bill 56 would provide liability protection from future environmental orders for municipalities if they take actions for the purpose of a tax sale or take actions related to other municipal responsibilities.

Second, the Bill would provide liability protection from future environmental orders for secured creditors while they protect their security interests in a property.

Third, Bill 56 also would provide liability protection for a fiduciary acting in a personal capacity.

Fourth, the Bill also would provide protection from environmental orders for any person conducting an environmental investigation while acquiring interest in a property.

Fifth, Bill 56 further would provide liability protection from future environmental orders for owners who follow the prescribed site assessment and cleanup process that includes filing a record of site condition with the Bill's new proposed site registry and using a certified consultant.

Sixth, Bill 56 also would propose to maintain the Ministry's power to issue an order in response to an environmental emergency.[62]

These measures largely adopt the current MOE global environmental agreement protections for lenders and expand them to other actors in the process, such as municipalities.

c. Quality assurance mechanisms

Bill 56 also proposes to amend the *Environmental Protection Act* to authorize new quality-assurance measures. First, the Bill would introduce a number of measures, including sign-off by certified professionals, mandatory reporting to a site registry and an auditing process to ensure compliance with the legislation and regulations. Second, the Bill would authorize regulations to establish the standards for certification and to support the site registry.[63]

These measures are meant to enhance the integrity of the site-assessment process, which has

come under fire in recent years.[64] However, the proposed measures contained in Bill 56 also raise more questions than they answer about exactly the intended oversight role for MOE in the quality-assurance process. Is the certification of, and sign-off by, professionals a form of self-regulation substituting for prior approval of cleanups by MOE? Are the certified professionals to be surrogates for MOE inspectors in reviewing completed cleanups?

d. Planning tools

The Bill also proposes amendments to the *Planning Act*. These amendments would do the following. First, clarify the definition and scope of "community-improvement project area" by including environmental, social or community economic development as reasons to consider an area for community improvement. Second, provide for criteria-based community improvement plans to address brownfield properties on a site-by-site basis. Third, streamline the planning approval process for community improvement plans by not requiring the minister's approval, except where the powers of a municipal council involve providing financial assistance. Fourth, increase municipal flexibility in the provision of grants and loans by including not only owners but tenants and the assignees of owners and tenants as well.[65]

Bill 56's planning proposals mostly adopt those recommended by the province's expert advisory panel. However, it is not clear whether the panel's recommendation that municipalities be obligated to require evidence of site cleanup as a condition of development approval in "as-of-right" zoning situations has been adopted.

e. Financing Tools

Finally, Bill 56 would amend municipal legislation to assist in the financing of brownfields redevelopment in the following ways. The Bill would amend the *Municipal Tax Sales Act* to provide that a municipality may choose not to take ownership of a property when a tax sale is unsuccessful and provide that municipalities may enter and inspect land that is the subject of an unsuccessful tax sale for the purpose of conducting an environmental site assessment.[66] In addition, Bill 56 would amend the *Municipal Act* to allow municipalities to cancel or freeze the municipal and education taxes on brownfield properties for the purposes of site remediation.[67]

The expert advisory panel recommendation to involve the province in active funding of brownfield redevelopment was not included in Bill 56. This became a highly contentious issue in the ensuing legislative debates on the Bill, discussed below.

In addition, Bill 56 appears to attempt merely to level the playing field between brownfield and greenfield development rather than provide a clear financial advantage to brownfield redevelopment, even though the latter was viewed by some members of the panel as environmentally and socially superior to greenfield development.

4. The debates in the Ontario Legislature

Debate in the Ontario legislature identified both positive and negative attributes of Bill 56. Typical of views in support of Bill 56 were those expressed by the Hon. Chris Hodgson, Minister of Municipal Affairs and Housing who tabled Bill 56, and the Hon. Brad Clark, Minister of Transportation who supported it during second-reading debate in the legislature. Both ministers focused on many of the same themes identified by the provincial advisory panel. They also emphasized the importance of Bill 56 in the government's overall smart-growth strategy.

The ministers repeated three themes in their statements to the legislature in support of Bill 56. First, the need to remove existing obstacles to the cleanup and redevelopment of contaminated lands such as those posed by liability provisions under provincial environmental laws. Second, the environmental, social and economic gains expected in the communities where brownfields are cleaned up and redeveloped. Third, the corresponding reduction of development pressures on farmland and greenfields, thereby preserving these areas.[68] Interestingly, the Minister of the Environment neither introduced Bill 56 nor participated in the legislative debate. This is a surprising absence considering the dramatic effect Bill 56 will have on existing environmental laws.

Opposition party members praised the principles but not the particulars of Bill 56. Their concerns focused on four matters. First, there was concern that Bill 56 would achieve little because of the lack of a provincial funding commitment in the legislation to assist in the cleanup of brownfields. Other jurisdictions such as Quebec and New York have established funding programs in the tens, if not hundreds of millions, of dollars as part of their legislative efforts to restore brownfield properties.[69]

Second, there was concern that the Bill's emphasis on municipalities foregoing tax revenues on these properties as the primary fiscal incentive to owners, developers or lenders investing in such sites would be insufficient encouragement where site cleanup would be expensive. Moreover, because municipalities already face major budgetary squeezes from provincial downloading of other responsibilities, opposition members argued that this was the wrong financial approach to rely on for brownfield cleanup and redevelopment.[70]

Third, given major staff and budget cuts within the MOE over the past six years, there was concern about the availability or the intention of MOE staff to inspect the adequacy of clean ups of brownfield sites conducted under the Bill.[71]

Fourth, there was concern about the failure of the Bill to require the development of an inventory of sites that need priority clean up.[72]

There also was some disagreement amongst opposition members about the strengths and weaknesses of Bill 56. Some opposition members felt that the Bill 56 provisions for protection from liability might go too far in exempting the private sector from paying for cleanup costs. This concern related to both past owners who created the problem and then abandoned the site, and prospective owners who could obtain municipal tax breaks while acquiring a property, the value of which is enhanced at taxpayer expense.[73] Other opposition members pointed to the possibility that the Bill 56 protections from liability might not go far enough in encouraging the private sector to invest in cleanup and redevelopment of brownfield sites. They pointed to the failure of the Bill to protect innocent purchasers from prosecution and civil suits; failure of the Bill to protect owners from liability for off-site problems, such as groundwater; and lack of protection for corporate officers and directors.[74]

Despite the many concerns identified, Bill 56 received Royal Assent on November 2, 2001.

5. What needs to be avoided in facilitating brownfield redevelopment: Second-class environmental health protection

The primary things that can be said in favour of Bill 56 are that the provincial government recognizes the need for a multi-pronged strategy that addresses cleanup standards, the scope of environmental liability, quality-assurance, planning, and fiscal measures. However, the problem is the content the government actually gives to these components of the strategy. In particular, there is at least a three-fold concern with the price that will be paid for brownfield redevelopment by the Ontario public and the communities where these properties are located. First, environmental cleanup standards are likely to become (or remain) more lenient. Second, cleanup processes are likely to speed-up but with less governmental and community oversight. Third, the liability of owners and developers will be limited, with the corresponding potential for them to reap windfall profits while the taxpayer may end up footing a large, if indeterminate, portion of the cleanup bill.[75] In short, we may be in store for faster, dirtier, cheaper (for owners/developers), but more expensive (for the public) environmental cleanups.

It is quite possible that the fewest benefits from Bill 56 will flow to those living in the shadow of Bill 56 cleanups. Sound environmental law should seek to relieve communities of the environmental and health burdens created by brownfields in their midst; not leave them with potentially second-class environmental protection. Environmental protection should be about the equitable application of environmental rules. It is a vital question whether a community's long-term interests are served by brownfield redevelopment achieved on the basis of reduced environmental liability rules, potentially less stringent environmental-cleanup standards and an MOE that may be nowhere to be found.

IV. Conclusions

As we noted at the outset, hazardous wastes and brownfields are connected at the hip. Addressing questions of reduction in hazardous-waste generation through stronger regulatory standards, restrictions on land disposal of untreated wastes and fees on per-tonne generation to cover the clean-up costs for abandoned contaminated sites can go a long way toward solving questions of brownfield liability, clean-up standards and abandoned site remediation. However, to date the province has failed to view the two issues as connected.

The province has rightly started at the beginning on some initiatives, such as the need to improve the definition of what constitutes hazardous wastes for regulatory purposes. However, other provincial initiatives, such as providing relief from liability and loosening cleanup standards for contaminated sites, may, by themselves, make the problem of brownfied sites worse in the long-term. A contaminated-sites fund financed in part by fees imposed on hazardous waste generators could go a long way toward solving both the need to remediate contaminated sites and to reduce hazardous-waste generation in the province. It remains to be seen whether the provincial government will connect the dots to solve both of these problems in the future.

CHAPTER 5. ENFORCEMENT: THE NEW SWAT TEAM

I. Introduction and Background: A Short History on Environmental Compliance and Enforcement in Ontario — Found, Lost, Found

In recent years, there has been increased international recognition of the importance of compliance and enforcement measures in achieving environmental management goals and objectives. The 1992 United Nations Conference on Environment and Development ("Rio Conference"), for example, emphasized this importance when it stated that:

> "Laws and regulations are among the most important instruments for transforming environment and development policies into action….It is essential to develop and implement enforceable and effective laws and regulations that are based upon sound social, ecological, economic and scientific principles. It is equally critical to develop workable programs to enforce compliance with the laws, regulations, and standards that are adopted….Each country should develop strategies to maximize compliance with its own laws and regulations. These strategies should include sanctions which are designed to punish infractions, obtain restitution and deter future violations. Methods for regularly reviewing compliance and for deterring violations must be implemented."[1]

Similar aims may be found in the North American Agreement on Environmental Cooperation (sometimes known as the Environmental Side Agreement to NAFTA) signed by Canada, Mexico and the United States in 1993. Each party to the agreement must achieve "high levels of environmental protection and compliance" with their respective environmental laws and regulations.[2] The agreement also obliges the parties to effectively enforce their respective environmental laws and sets out a non-exhaustive list of actions that may be deemed to constitute effective enforcement.[3]

These various international initiatives have reinforced interest at the national and sub-national level in ensuring compliance and enforcement with domestic environmental laws. In Canada, both the federal and provincial governments have developed the concepts of "compliance" and "enforcement" at the policy level. In general, "compliance" has been defined as "the state of conformity with the law." Measures that governments use to ensure compliance include written and verbal communication, consultation, monitoring, inspection, data review and enforcement. In general, "enforcement" has been defined as "activities that compel offenders to comply with their legislative requirements." Enforcement activities can include investigation of alleged violations, imposition of corrective measures, administrative responses to compel compliance and prosecution.[4]

In light of the above, the thesis of this chapter is very simple. In the decade before the current government took office, Ontario had developed a reasonable program of environmental compliance and enforcement under three different provincial governments. With the advent of the Conservative government, environmental compliance and enforcement efforts went into a — some would say rapid and precipitous — decline. As a result of a number of recent events — some insidious, some calamitous — the government has rediscovered the value of environmental compliance and enforcement efforts. The Soil, Water, Air Team (SWAT) is the name the government has given to its renewed effort to become active in environmental compliance and enforcement. The questions that linger are how effective is this initiative, how long will it last, and what about the rest of the Ministry of the Environment (MOE) — when will it be rediscovered?

II. Environmental Compliance and Enforcement Pre-SWAT: What We had Before We Lost it and Got it Back Again

The early 1980s in Ontario stand as an interesting parallel to what is occurring in the province two decades later with the advent of SWAT; a rediscovery of the value of effective environmental compliance and enforcement. In the last years of the Davis government, the province undertook a number of significant measures to improve compliance and enforcement efforts. These initiatives were carried on and expanded by both the Peterson and Rae governments. In retrospect, the years 1985-1995 stand out as a period of relative prosperity in terms of environmental compliance and enforcement initiatives compared to what occurred post-1995.

A. Before the Conservative years: Ten years of progress

1. Compliance

Effective compliance often is a function of the clarity and specificity of approvals issued to the regulated community under environmental laws. The more specific the legal obligation is on the regulated entity, the easier it is for the regulator to observe whether the entity is complying with the provision. Specific conditions of approval are also easier to enforce. However, historically the province appears to have preferred an approach to environmental regulation that favoured granting both the regulated and the regulator flexibility on how compliance with approvals would be achieved. The hallmark of this flexibility was the view held within the Approvals Branch of the MOE that implied conditions were sufficient to justify issuing an approval and ensuring compliance by a holder of an approval within the overall framework of the law.[5] In practice, this often meant that certificates of approval issued under provincial environmental laws contained few or no conditions.[6]

Beginning in the early to mid-'80s, Ontario began revising its approach by imposing express conditions in environmental approvals issued in areas as diverse as water, sewage, landfill sites and related areas.[7] A number of factors helped bring about this change in MOE's approach.

First, the public was beginning to demand greater compliance with, and enforcement of, provincial environmental laws than had been the case in the 1970s.[8] Second, there was the view held by MOE district offices (responsible for inspecting and monitoring compliance with approvals) and the Legal Services Branch that it was more difficult, if not impossible, to assure effective compliance and enforcement in the absence of express conditions in certificates of approval.[9]

Third, the courts were expressing the opinion that all of the foundation material underlying an application for a certificate of approval dictated the scope of the approval and therefore should be expressly mentioned or incorporated by reference into the approval or the courts would do so. Accordingly, the courts were unwilling, for example, to uphold the legality of disposal of hazardous wastes not expressly applied for by applicants for a non-hazardous waste site approval. Applications for approvals that did not specify what specific types of wastes could be accepted by a non-hazardous waste site also had the effect of circumventing preventive measures such as public hearings that otherwise would be required if hazardous wastes were known to be included as part of the application. In addition, compliance and enforcement efforts were made more difficult where there was uncertainty about what waste types were permitted at a facility.[10]

Fourth, the change in government in 1985 may have had the effect of accelerating the movement to add conditions to approvals in order to increase and improve environmental compliance, though this is not entirely clear.[11]

Also during this period, the powers of inspection for purposes of administering the province's environmental laws increased dramatically to reinforce the emerging legal and policy developments noted above.[12]

Overall, this change in thinking during the 1985-95 period helped to significantly improve MOE's

definition of what constituted compliance[13] and its ability to assess and obtain compliance by the regulated community.[14] These factors also contributed to the effectiveness of new enforcement initiatives during the period (discussed below).

2. Enforcement

Commentators on environmental enforcement in Ontario in the late 1970s through to the early 1980s paint a similar picture that dovetails with the prevailing situation described above regarding compliance. According to Dianne Saxe, a former MOE prosecutor and now a lawyer in private practice:

> "Environmental prosecutions received very little emphasis in the 1970s and early 1980s. For more than a decade, regulators concentrated on administrative remedies, almost to the exclusion of prosecution. As late as 1984, the Province of Ontario launched only 54 prosecutions despite large numbers of known breaches. By 1985, environmental regulation which concentrated almost exclusively on negotiation and administrative remedies had proved to have limited effectiveness."[15]

Accordingly, the factors that drove improvements in MOE compliance initiatives in the early to mid-'80s also were factors with respect to enforcement. In 1980, senior management at the MOE made key decisions to create a number of specialists to assist in the enforcement of environmental laws and regulations. In late 1980, MOE created a Special Investigations Unit (SIU), whose 13 members were trained at the Ontario Police College. By 1984, MOE was looking into the establishment of a branch of the ministry to investigate and enforce environmental laws in the province. In 1985, Susan Fish, the last Minister of the Environment in the Davis government, announced that the province would establish a "world class" Investigations and Enforcement Branch (IEB) consisting of approximately 65 investigators in addition to support staff.[16]

By 1985, with the inception of the IEB, the MOE became increasingly enforcement oriented and the number of prosecutions increased dramatically from this year forward. The IEB had more staff that had obtained police training and were more experienced in conducting investigations and preparing Crown Briefs on a full-time basis. This compared with the situation in the early 1980s where the SIU and the abatement sections of MOE district offices were involved in prosecutions only on a sporadic basis.[17] Also during the post-1985 period, the powers of provincial officers investigating an offence were increased, the liability of officers and directors was expanded, and higher fine levels were adopted under Ontario environmental laws.[18]

If statistics on fines alone tell the enforcement story, there was a steady increase in fines obtained by MOE from the period 1985-86 ($600,000) to 1992 (over $3.6 million). After a drop in fines obtained for two years 1993-1994 ($2.5 million in fines on average each year), fines again increased in 1995 (to just over $3 million). In the five-year period ending in 1995, total fines obtained from enforcement actions averaged between 300-500 per cent higher each year when compared to 1985 levels.[19]

Indeed, a survey of corporations in this period conducted by Saxe identified the broader impact of this increase in enforcement activity on the behaviour of the regulated community. The survey provided:

> "empirical evidence to support the decision of environmental regulators to give greater emphasis to prosecution, both of corporations and of their officers and directors. The survey indicated that corporations which have been prosecuted report allocating significantly more of their resources to environmental protection than do corporations which have not been prosecuted."[20]

What is perhaps equally important is that a permanent "enforcement culture" appeared to have been established within MOE[21] reflected in such ministry publications as *Offences Against The Environment*, which annually summarized statistics and trends in the enforcement of provincial environmental laws.[22]

B. Since 1995: A period of famine?

1. Compliance

The arrival of the Conservative government in 1995 signaled a sea change in MOE compliance philosophy, with many practices reverting back to the pre-1985 situation. In previous reports, CIELAP has documented in painful detail many of these changes, including deep cuts to the MOE budget, professional and support staff,[23] legislative amendments to streamline approvals or deregulate certain areas of activity,[24] and an emphasis on voluntary compliance measures as a substitute for governmental compliance initiatives.[25]

Two recent reports illustrate the cumulative effect of these initiatives on the adequacy of environmental compliance in Ontario. The first report is the 2000 Annual Report of the Provincial Auditor of Ontario.[26] The second is the 2000-2001 Annual Report of the Environmental Commissioner of Ontario.[27]

Reporting in December 2000, the Provincial Auditor noted several key compliance-related problems with the MOE's Operations Division, which is responsible for administering approvals, inspection and enforcement matters in the province.[28] First, the Provincial Auditor found that the MOE's systems were inadequate for assessing whether and to what extent the over 220,000 certificates of approval issued under provincial environmental laws since 1957 needed to be updated with new conditions and requirements. The number of existing certificates, and the almost 8,000 new certificates issued each year, make it impractical for MOE staff to closely monitor all site operators for compliance with the conditions of their approvals. As a result, MOE did not know the extent to which facilities were not meeting current environmental standards.

Second, the Provincial Auditor found that the costs to MOE of monitoring site operators for compliance can be significant, particularly for large operations. Consequently, the auditor suggested that there was a need to ensure that conditions of approval include self-monitoring requirements so that approval holders can report on their performance and demonstrate their compliance to MOE. For example, the province's effluent limit regulations for certain industrial sectors discharging wastewater to provincial waterways, which went into effect in the early to mid-'90s, contain obligations for large operators to test and report to MOE and the public on their effluents in order to ensure compliance with discharge parameters. However, the Provincial Auditor noted that these regulations generally only apply to the largest operators (about 190 in the province), which represent a small number (less than one percent) of the total certificates of approval that have been granted.

Third, the Provincial Auditor found that a reduction in MOE staff of 25 percent over the last four years had contributed to a 34 percent decrease in the number of ministry-initiated inspections conducted per year. The auditor noted that inspections are an important means of assessing a facility's level of compliance with legislative requirements and play a key role in promoting voluntary compliance. Prior to 1996, according to the auditor, MOE had a well-defined process in place for allocating available staff resources to ensure that the types of facilities inspected were based on priorities of highest risk. However, since 1996 inspections have decreased significantly, even in high-risk areas. For example, the auditor noted that from 1995-96 to 1999-2000, MOE-initiated inspections of hazardous and liquid industrial waste sites declined by more than 40 percent (2,000 to 1,190 per year).

Fourth, the Provincial Auditor found a number of discrepancies in MOE's management of inspection activities. These included the following concerns:

- only 50 percent of District offices visited maintained detailed reports on facilities planned for inspection, those actually completed and the results;

- none of the district offices visited maintained documentation on how the MOE's selection criteria had been applied to arrive at the final list of sites planned for inspection; and

- lack of consistency among district or area offices on whether their inspections were con-

ducted on a surprise basis or by appointment with facility operators. The auditor noted that surprise inspections have significant advantages for identifying violations as well as acting as a greater deterrent.

Fifth, the Provincial Auditor found problems with MOE information-tracking systems. For example, the MOE did not have an adequate tracking system to ensure that conditions of approval were complied with. As a result, MOE District offices did not have the information needed to initiate follow-up action, such as sending reminder notices or conducting inspections.

Overall, the Provincial Auditor concluded that the MOE did not have satisfactory systems and procedures in place to ensure compliance with provincial environmental legislation.

Reporting in September 2001, the Environmental Commissioner of Ontario made findings similar to that of the Provincial Auditor on MOE compliance programs, noting in particular that MOE's approach to ensuring compliance with provincial environmental laws is unclear and inconsistent. The commissioner also noted that the province's emphasis on voluntary compliance since 1995 has been less effective than mandatory compliance in achieving environmental goals.[29]

2. Enforcement

The arrival of the Conservative government in 1995 also signaled a sea change in MOE enforcement philosophy and practice. In its previous reports, CIELAP has also documented these changes. In CIELAP's *Fourth Year Report* (issued in 1999), for example, we noted that:

> "…the 1995-1999 period witnessed a precipitous decline in the province's environmental law enforcement activities. The total fines obtained by the [MOE] in 1998, the most recent year for which data could be obtained, were $863,840 - the lowest figure since 1986/1987, and less than one-third of the total for 1995. Fines fell, in part, as a consequence of the 28% reduction in [IEB] staff between 1995-1998."[30]

In last year's *Fifth Year Report*, CIELAP noted that the province had begun to reverse this decline[31] and, according to MOE figures, fines have begun to increase significantly in the last two years (1999 and 2000).[32]

Nonetheless, the overall MOE enforcement situation since 1995 has been a disturbing one as evidenced by recent reports issued by the Provincial Auditor and, more recently, by the Sierra Legal Defence Fund.

In December 2000, the Provincial Auditor noted several key enforcement-related problems with the MOE's Operations Division, which, as noted above, is responsible for enforcement matters in the province.[33] First, the Provincial Auditor noted that for environmental legislation to be effective, MOE needs to be taking enforcement action in an aggressive, appropriate and timely manner when violations are identified, particularly repeat violations. The auditor found that there were instances where provincial environmental officers did not follow-up on violations to ensure that the facility operator had subsequently corrected the deficiency and instances where they had responded inappropriately, such as using voluntary compliance measures when mandatory compliance was required.

Second, the auditor noted that in 1999 the MOE conducted an internal review of the effectiveness of its inspection and enforcement program that revealed concerns similar to the auditor's regarding the inappropriate use of voluntary compliance measures. The MOE internal review determined that in 69 of 100 inspection reports reviewed, violations were identified, including 22 considered significant by the MOE. However, enforcement actions taken included only one control order and no fines or charges. Only one request out of 19 made by environmental officers for facility operators to produce voluntary abatement action plans resulted in receipt by MOE of such a plan.

Third, the auditor also raised concerns that MOE guidelines allowed environmental officers the discretion to use voluntary measures even in cases of significant or repeat violations and in cases where corrective action had not been taken in a timely manner. The auditor noted that MOE's

internal assessment had indicated that approximately one-third of all violations identified were repeat violations. The auditor noted that it is the policy of other regulatory programs to prosecute if a violation found during a routine inspection has been identified on previous inspections.

Fourth, the auditor noted that MOE guidelines require environmental officers to focus their efforts in areas where the greatest environmental and human health benefit can be achieved. The Auditor found that MOE management and staff only considered violations as significant where an adverse effect, such as a spill, was evident. Violations considered minor by MOE included failure to comply with preventive measures outlined in environmental legislation, even though violations of such provisions may increase the risk of extensive damage to the environment and human health. The auditor pointed to the MOE's assessment of its inspection program conducted in 1999 in which 51 of 58 types of violations were considered minor. Violations considered to be minor included: failure to take or report samples of effluent or water quality; use of an uncertified operator; lack of a contingency plan should systems fail; and the operation of water and sewage facilities not in accordance with approval specifications. According to the auditor, however, the violations identified could, depending on the circumstances be significant. An example would be if the facilities were high risk and/or the operators had a past history of violations.

Fifth, the Provincial Auditor found that although fines imposed for violation of provincial environmental laws had averaged $1.5 million per year, in fact, more than $10 million in fines levied over many years remained unpaid. The auditor noted that the significant amount of unpaid fines compromised the extent to which enforcement measures act as an effective deterrent. (Ironically, in November 2000, the government enacted the *Toughest Environmental Penalties Act* (TEPA), which dramatically increased fines for those convicted of violating environmental laws. But if the government is not collecting the fines, how tough on offenders is that?)[34] Overall, the Provincial Auditor concluded that more stringent enforcement is required of provincial environmental laws.

The November 2001 report of the Sierra Legal Defence Fund (SLDF) focused on violations by industrial and municipal wastewater dischargers of provincial water-pollution control laws between 1996 and 1999.[35] The report documented more than 10,000 violations of provincial wastewater laws since 1995, including more than 3,200 violations in 1999 (compared to approximately 700 in 1995). The report also found that MOE laid charges against only six of 168 violating facilities for exceeding wastewater discharge limits in 1999 and only 11 facilities in total since 1995. Given the more than 10,000 violations, SLDF characterized the province's enforcement record as "abysmal" and noted that a program of continued reliance on voluntary action by violators had proven "extremely ineffective."

The SLDF report follows one the group produced in March 1999 in which it found that only three of 134 companies and sewage treatment plants that had violated water-pollution control requirements in 1996 had been successfully prosecuted by MOE. A similar analysis of air-pollution infractions indicated that in 1997 there were 1,224 violations of air-pollution regulations resulting in four charges. In 1998, there were 3,354 violations resulting in two charges.[36]

Overall, there was a litany of changes to MOE enforcement capacity, initiatives and results after 1995. These included the following:

- budget and associated professional and administrative staff cuts;
- greater emphasis on voluntary compliance than on enforcement measures;
- highly fluctuating levels of prosecutions undertaken and of fines obtained;
- systemic failure to address significant and repeat violations;
- lack of supporting information from District environmental officers responsible for abatement, who themselves had suffered significant staff cuts;

- cessation after 1994 of the publication *Offences Against The Environment*;[37]

- forbidding investigators from talking to the media without first vetting questions through the MOE communications branch.[38]

If the above catalogue suggests anything, it is the breakdown of the "enforcement culture" within MOE that had been developing from 1985 to 1995.[39]

III. SWAT: Compliance and Enforcement Rediscovered

Given the battering MOE has taken on a variety of environmental fronts, especially following the events of May 2000 in Walkerton, it was perhaps not surprising that the government would "rediscover" the virtues of compliance and enforcement and respond in some dramatic manner to regain credibility with the public. The government's response was to announce in September 2000 the formation of a Soil, Water, Air Team (SWAT).[40] What follows is a summary of the purposes of SWAT, its record to date, and possible future directions.

A. Where compliance meets enforcement

The government's September 2000 statement announcing the formation of SWAT describes it as a "highly mobile and focused compliance, inspection, and enforcement…team to crack down on deliberate and repeat polluters and ensure they comply with Ontario's environmental laws." The team also was set up as a "separate inspection, compliance, and enforcement unit" within MOE, made up of 65 inspectors, investigators, environmental engineers, environmental-program analysts, scientists and lab technicians. SWAT investigators were to focus solely on the investigation and prosecution of environmental infractions identified by the team's compliance inspectors. The expectation at the time of the announcement was that SWAT would deter those who operate outside the law and improve environmental protection by focusing on areas of greatest concern, such as air, water quality, and hazardous wastes.

Interestingly, in announcing the formation of SWAT, the Minister of Environment (at the time the Hon. Dan Newman) stated that the government: "…will not tolerate companies or individuals who *intentionally* [emphasis added] break Ontario's environmental laws." As the minister (and certainly the MOE) should know, Ontario's environmental laws, with some exceptions, are not based on imposing liability on polluters only if they "intentionally" violate the law. The Supreme Court of Canada since the late 1970s has held that public-welfare legislation, including environmental legislation, establishes offences of strict liability. This means that once the Crown proves the commission of the offence beyond a reasonable doubt, the burden shifts to the defendant to demonstrate that it took all reasonable steps in the circumstances to avoid commission of the offence.[41] This is sometimes described as a "negligence with reverse onus" offence (i.e. once the Crown proves that the defendant did the act, the burden shifts to the defendant to show that it was not negligent in the circumstances).

Strict liability offences create a much lower standard of proof for the Crown to meet when protecting the public welfare. Indeed, without such a seminal development in the law, it is unlikely that environmental offences could ever be effectively dealt with in our courts since it would often be nearly impossible to prove the intent of the accused. The point of public-welfare type legislation, including environmental legislation, is to prevent damage to society's interests from a myriad of commercial or industrial activities. Usually only the most heinous of crimes (e.g. those found in the *Criminal Code of Canada*) require that the Crown prove that the accused "intend," or was "reckless" or "willfully blind" to the fact that its conduct would result in the act that is the subject of the offence.

By May 2001, the province had yet another Minister of the Environment, the Hon. Elizabeth Witmer, and yet another statement on the SWAT program. In a statement to the legislature, Ms. Witmer advised that the SWAT team would be a permanent unit within MOE.[42] In June 2001, the Minister re-affirmed this position.[43]

What is perhaps most important in the creation of the SWAT team is a recognition by the government that compliance and enforcement must work in tandem to protect the public interest.

B. The record so far

Despite the great fanfare that accompanied the September 2000 announcement establishing the SWAT team, information on what it has accomplished had been comparatively thin up until the fall of 2001. In late 2001, the MOE established a website on the activities of the SWAT team that has filled out the picture somewhat.[44]

In June 2001, Minister Witmer stated that the SWAT team operated by "strategically targeting sectors of concern." The Minister's June 2001 announcement noted that the SWAT team had conducted a "blitz" of 38 septic haulers in which the team found numerous infractions including: lack of vehicle markings; operation of septic-waste hauling without a certificate of approval; and improper record keeping. The team handed out 18 tickets under the *Provincial Offences Act* (carrying up to a maximum fine of $500). Two cases of illegal dumping of septic waste were being reviewed by MOE for possible prosecution that could, upon conviction, attract bigger fines under *TEPA*. According to the minister, "this recent crackdown sends a message to septic waste haulers: there will be consequences if you do not meet…environmental obligations."[45] A late December 2001 MOE announcement updating the earlier investigations indicated that the province found "close to a 100 percent non-compliance rate" in this sector and up to seven cases had been referred to the IEB for further review.[46]

In August 2001, Minister Witmer announced the results of the SWAT team's province-wide inspection sweep of the electro-metal plating sector. The team selected and inspected 70 key companies in this sector and found 51 of them — 73 percent — to be in violation of provincial environmental laws. The team found numerous infractions including: improper venting of air emissions; improper storage of waste on site; and possible illegal discharge of waste. As a result, SWAT issued 51 provincial officer orders, 10 *Provincial Offences Act* ticket notices and referred two cases to the IEB for further review and possible prosecution. Minister Witmer noted at the time that the message being sent to electro-metal platers was "non-compliance is unacceptable."[47]

To date, the SWAT team has conducted more than 700 inspections in such areas as pesticide applicators, septic-waste haulers, hazardous liquid industrial and solid waste haulers, electro-metal platers, hazardous-waste transfer and processing facilities, and recycling in the industrial, commercial, and institutional sectors.[48]

In the case of the septic hauling, electro-metal plating and pesticide applicator inspection sweeps, the government has published some general information on compliance and enforcement "outputs" and "outcomes" achieved, including the number of inspections conducted, compliance rates observed and enforcement responses undertaken.[49] What the MOE has yet to provide is more comprehensive information on compliance and enforcement outcomes[50] or resulting improvements in overall environmental quality in these sectors either generally or on a company-by-company basis. An attempt in August 2001 by CIELAP to obtain more comprehensive information about SWAT performance through a *Freedom of Information Act* request was, at the time of writing, unsuccessful. (We have included the questions asked of MOE as part of this chapter.)[51]

C. What the future holds

Since life seems to operate in cycles, perhaps it should not be surprising that environmental compliance and enforcement does so as well. On its face, the SWAT initiative appears to be a tentative first step toward the resurgence of vigorous environmental compliance and enforcement measures in Ontario.

Certainly, MOE front-line staff members believe that the SWAT team has been highly effective particularly because of the commitment of senior management, training, resources and manpower to the program. They contrast the SWAT team with the current unsatisfactory situation in MOE District Abatement offices where environmental officers are responsible for a broad range of issues and therefore cannot develop adequate expertise

in specific areas. MOE front-line staff members would like to see the SWAT team concept formalized and expanded to all aspects of abatement, investigation and enforcement work as well as being fully integrated with District offices. They believe that the result would be specialized groups of officers working in conjunction with investigation and enforcement personnel to take a proactive approach to examination of all priority sectors, including water and sewage.[52]

If SWAT is to move in that direction one of the first things that will have to happen is that members of the team become truly permanent members of the civil service. According to evidence given during the Walkerton Inquiry by a member of the IEB, all members of SWAT are on contracts of two years or less in duration.[53] This hardly squares with Minister Witmer's statement in May 2001 that SWAT is a permanent unit within MOE.

The final issue of concern is that SWAT may be an island of effectiveness in a still largely dysfunctional MOE. The funding and staff cuts that have so devastated the ministry over the last six years have not been restored. Thus the question that remains is, having rediscovered compliance and enforcement as a virtue to be embraced, will the government follow through and recognize that in the long run SWAT by itself is not sufficient or sustainable if the MOE remains a starved remnant of its former self? MOE may have been down so long that SWAT looks like up to the government; but without more resources devoted to the rest of the ministry, it won't look that way to the Ontario public.

CONCLUSION

Conclusion

This report provides an overview of the provincial government's initiatives between the period of June, 2000 and June 2001 in the following areas: environmental governance, water, air, hazardous waste and enforcement. In some cases, initiatives just prior to and just after this period are included due to their impacts in this sixth year of the Common Sense Revolution.

Regarding environmental governance, the provincial government's response to the tragedy of Walkerton was to implement a conceptual framework of environmental management developed in the Gibbons' Report and based on a notion of "integrated compliance". This idea prominently features private sector self-regulation and purports to replace the need for enforceable legal standards. Compliance assistance to facilitate this transition is provided by voluntary government guidelines that industrial and agricultural sectors are free to redefine in management plans and which can override local standards.

The Report suffered from a misplaced reliance on the Dutch approach to sustainable development. Dutch covenants with mature industrial sectors are meant to implement pre-existing and clearly articulated (and financed) government-policy initiatives; they do not define them. Unlike the current legislative trend in Ontario, the Dutch do not delegate standard setting and compliance assurance to industry before these expectations are codified in enforceable and effective regulations. In recommending the further delegation of environmental responsibilities to the private sector, the Gibbons' Report confuses the end game of sustainable development with the means for getting there. The risks – human health, environmental, trade-related, and constitutional – are just too great to allow an unaccountable private sector to manage public goods, such as clean air and water.

With respect to water, in CIELAP's *Fifth Year Report* we noted that: "The tragedy in Walkerton is only one piece of a much larger problem". That continues to be true. Whether it's drinking water, source water, water conservation or the Great Lakes, provincial environmental controls, with some exceptions, have been in full retreat or have had only a marginally positive impact.

Ontario water law and policy must address these four areas as a whole and must rededicate staff, budgetary, legislative, and regulatory measures to the tasks necessary to protect, restore and enhance provincial water resources. As somebody once said: "It's not good enough to be in the boat. You must have an oar in the water, and be moving in the right direction. Otherwise, you'll go over the falls."

From June of 2000 to June of 2001, the provincial approach to air quality has been well intentioned, though lacking in substance and action. The province should be applauded for some of its positive initiatives, such as increasing public awareness of air pollution through the smog-alert warning system. On the other hand, the province continues to operate some of Canada's worst polluting facilities, including the worst in the country, the Nanticoke coal-burning power plant.

Overall, the province seems to be taking an active stance against air pollution through the introduction of a number of new regulations aimed at monitoring and capping air pollution emissions as well as introducing a possible means of controlling them using market forces. However, these regulations have been disappointing in their lack of scope and their real chance of resulting in significant improvements in air quality are slim.

Reforming Ontario law on the definition and identification of hazardous waste is important and a welcomed first step. If Ontario is to avoid a continued rapid increase in hazardous-waste imports, the province will need to pursue a more comprehensive approach to hazardous-waste regulatory reform. Adoption of the following measures is necessary: rigourous standards for the treatment, storage, and disposal of hazardous waste; restrictions on the land disposal of un-

treated hazardous waste; imposition of comprehensive liability for hazardous waste mismanagement, and; incentives, if not requirements, to reduce hazardous-waste generation, including charges and other economic instruments.

Initiatives such as these also would contribute to assisting Canada in meeting its domestic legal and international obligations for control of the transboundary movement of hazardous wastes as well as protection of the Great Lakes. Taking this first step is important, but Ontario needs to develop a long-term strategy for hazardous waste management. The failure to develop a comprehensive strategy will create problems for the province in the future as it tries to deal with the back-end of the hazardous waste problem — contaminated lands.

Since life seems to operate in cycles, perhaps it should not be so surprising that environmental compliance and enforcement does so as well. The SWAT compliance and enforcement initiative is welcomed as a tentative first step toward the resurgence of vigourous environmental compliance and enforcement measures in Ontario.

SWAT, however, may be an island of effectiveness in a still largely dysfunctional MOE. Thus, the question that remains is having re-discovered compliance and enforcement as a virtue to be embraced, will the government follow through and recognize that in the long run SWAT, by itself, will not be sufficient if the MOE remains a starved remnant of its former self?

As we conclude this sixth annual report on Ontario's environment protection efforts, the Province of Ontario continues to move toward relying more and more on voluntary, private-sector programs and initiatives to protect and restore the environment in Ontario. The six-year track record for this approach is not encouraging and the clear lesson from Walkerton and elsewhere is that rigorous government oversight remains a key element of effective environmental protection. Equally worrisome is that in too many areas the government has put in place piecemeal programs and policies that are more stop-gap measures and crisis management than comprehensive directions for putting Ontario firmly on the road to a more sustainable future. The people of Ontario deserve – and want – better, but only time will tell whether our post-Walkerton government has learned any lessons from that completely avoidable environmental tragedy. We look forward to working with Ontario stakeholders as the government continues to pursue a sustainable development strategy, that sets out clear objectives and then develops the necessary social consensus around those objectives and how to achieve them in a thoughtful and measurable fashion.

ENDNOTES

Chapter 1 – New Vision, New Minister, New Plan

1 See Sustainable Development in Canada, A New Federal Plan, Canadian Institute for Environmental Law and Policy, 2001, www.cielap.org for a recent discussion on the elements of a proposed four-part plan.

2 See water chapter.

3 Managing the Environment: A Review of Best Practices, News Release: Harris Welcomes Report's 21st Century Vision Of Environmental Protection - February 7, 2001

4 See Annex 1 for a complete list of the Reports recommendations.

5 According to the Toronto Star, February 8, 2001, A03, when the Report was released, Premier Harris said he would not accept any responsibility for the state of Ontario's environment, instead blaming other governments, environment ministry staff and environmental interest groups. "When we tried to bring in major changes it was resisted very vigorously by the opposition parties, by the ministry and by a number of interest groups that wanted to hang onto the status quo," he said.

6 Canadian Institute for Environmental Law and Policy, *Ontario's Environment and the Common Sense Revolution: A Fifth Year Report* (Toronto: CIELAP, 2000) at 7 [hereinafter *CIELAP Fifth Year Report*] (noting that since the advent of the Harris government in 1995, MOE budgets have been cut by approximately 60 percent, based on the combined cuts to capital and operating expenses).

5b. Part I - Report of the Walkerton Inquiry, p. 29. www.walkertoninquiry.com

7 But voluntary approaches are controversial. See, for example, "Comments On Environment Canada's Environmental Leaders Initiative", by Delores Broten of Reach for Unbleached (based in British Columbia www.rfu.org). Several member organizations from the Canadian Environmental Network Toxics Caucus, responded to Environment Canada's proposed Environmental Leaders Initiative, a voluntary program which aims at initiating action on selected toxic substances. Environmental organizations highlighted many concerns with the proposed program, including the insufficient resources devoted to the effort by Environment Canada, a lack of focus on the elimination of toxics or on pollution prevention, as well as the ease with which industry can ignore the program. The groups also noted that the program could weaken the enforcement and compliance of federal environmental laws and may impede and retard actual regulatory action for substances deemed toxic in the future. The NGO submission, is available on CELA's website at: ww.cela.ca/toxics/leaders.pdf

8 Hansard, Thursday 10 May 2001, Hon Elizabeth Witmer

9 Review and Analysis of Best Practices in Public Reporting on Environmental Performance, Michael Keating, in Gibbons Managing the Environment Report. The paper A Review of Selected Canadian Agencies as Possible Environmental Management System Models for Ontario, Joseph Castrilli, in the Gibbons' Report also provided helpful insight to existing agency frameworks for the delivery of environmental management.

10 See Liquid Assets: State of Water Quality Assessment in Ontario, Dr. Lewis Molot, York University, Faculty of Environmental Studies, and see Appendix 1, The State of Groundwater Management and Information in Ontario, York University, Daniella Molnar, Masters of Environmental Studies candidate, 2001, www.cielap.org.

11 See Missing Values 2001, The Failure of Environmental Planning in Ontario, The Conservation Council of Ontario, pgs. 17-19, www.greenontario.org/cco, where Chris Winter nicely reorganizes the Gibbons' Recommendations into categories of public acceptability and argues against the compliance assurances schemes.

12 Gibbons was a deputy minister in the Ontario government between 1985 and 1994, holding positions at the Management Board Secretariat and the ministries of Government Services, Community and Social Services, and Consumer and Commercial Relations. Since 1995 she has been a partner at ExecutiveResource Group and she accepted a honourary doctor of laws degree from York University awarded in recognition of her contribution to public service, Government of Ontario Press Release, June 16, 2000.

13 "Ministry Admits Water Error", Richard Brennan and Brian McAndrew, The Toronto Star, May 30, 2000.

14 " Ontario Report Recommends Moving Away from Environmental Regulation, and Moving Away From the Environment Ministry", The Gallon Environment Letter, Vol. 5, No. 18, Mat 9, 2001

15 Richard Mackie and Martin Mittelstaedt, February 8, 2001 The Globe and Mail, Metro, A17.

16 Integrated Compliance Assurance, Paper One, in Managing the Environment Report, www.ene.gov.on.ca/envision/ergreport/index.htm.

17 Compliance Paper, p. 6.

18 Compliance Paper, p.8

19 Compliance Paper, p.8

20 Stratos Inc. Governance Report Number 3, in Managing the Environment Report, www.ene.gov.on.ca/envision/ergreport/index.htm.

21 The Netherlands leads the way in the development of environmental agreements with more than 100 in place. The agreements are made binding through operating

licenses. The country has agreements in several manufacturing sectors, notably chemicals, and for packaging and waste management.

22 Governance Paper, p.2

23 Norway, Denmark, Sweden and the Netherlands make extensive use of "green" taxes and have used the proceeds of such taxes to reduce other taxes. Such tax rebalancing or ecological tax reform is designed to correct market imperfections in the allocation of resources by internalizing environmental costs in the prices of products and services and represents therefore a powerful instrument to influence behaviour. Green taxes give departments of finance an explicit role in environmental policy while they provide another instrument to environmental agencies to achieve their goals. Green taxes were outside the scope this Paper.

24 The key steps in the creation of the Dutch vision of sustainable development have included: Taking a stable, long-term, perspective (twenty-years) but revisiting the NEPP every four years and preparing annual updates on environmental progress; Translating the concept of sustainable development into tangible environmental themes with well-defined targets; Changing the role of the Ministry of the Environment to emphasize process management, negotiation and consensus building; An open planning process involving all levels of government and stakeholders; Developing a long-term planning approach based on science and quantitative objectives under each of nine themes of closely interrelated environmental problems; Fostering the internalization of environmental issues, including self-regulation, by the target groups, within an overall framework set by government; (emphasis added).

25 Governance Paper, p.5

26 Governance Paper, p 14.

27 Rabe, B.G., 2000. "Power to the States: The Perils and Pitfalls of Decentralization," in*Environmental Policy: New Directions for the 21Century*, eds. N. Vig and M. Kraft (Washington, D.C.: Congressional Quarterly Press): 32-54. And see Rabe, B.G. 1999. "Federalism and Entrepreneurship: Explaining American and Canadian Innovation in Pollution Prevention and Regulatory Integration." *Policy Studies Journal* 27 (Spring): 288-306.

28 p. 16.

29 Sustainable Development in Canada, supra fn.1, at p, 3.

30 July 2000, ECO, The Protection of Ontario's Groundwater and Intensive Farming, www.eco.on.ca.

31 Government of Ontario News Release June 13, 2001, Environmental Bill of Rights Registry Number: AC01E0001, Ministry: Agriculture, Food and Rural Affairs.http://www.gov.on.ca/OMAFRA/english/agops/index.html.

32 For a detailed review, see NAFTA Effects on Water, Christine Elwell (ed), 2001, www.sierraclub.ca/national.

33 Ibid. p197 and Issue Study 2: Feedlot Production of Cattle in the United states and Mexico: Some Environmental Implications of the North American Free Trade Agreement (Commission for Environmental Cooperation)

34 Article 14, North American Agreement on Environmental Cooperation, 1994

35 Secretariat of the Commission for Environmental Cooperation, "Article 1591) Notification to Council that Development of a Factual Record is Warranted" A14/SEM/97-003/15/ADV

36 "When Water Kills" Macleans, July 12

37 Report of the Commissioner of the Environment and Sustainable Development to the House of Commons, 2001, Chapter 1, pp 149-157.

38 GATS and the Environment, by Christine Elwell, CIELAP, forthcoming.

39 Article 1502:3.b: " Each Party shall ensure that…any government monopoly good or service that it maintains or designates…acts solely in accordance with commercial considerations in its purchase or sale of the monopoly good or service in the relevant market…".

40 Environmental Commissioner of Ontario, "The Protection of Ontario's Groundwater and Intensive Farming: Special Report to the legislative Assembly of Ontario" (July 27, 2000)

41 ibid. at 6

42 ibid. at 9

43 ibid. at 10

44 Sierra Club of Canada, Eastern Canada Chapter, Response to the Government of Ontario's proposed Nutrient Management Act, http://eastern.sierraclub.ca/NMA_EBR_Response.pdf

45 Section 5 (2)(a)(i) states: Without limiting the generality of subsection (1), the Lieutenant Governor in Council may make regulations governing the management of materials containing Nutrients including, specifying standards for the size, capacity and locations of buildings or structures that are used to store materials containing nutrients or to house farm animals.

46 Delegation of Powers **55(1**) The Minister may enter into an agreement with and individual, partnership or corporation, delegating to the individual, partnership or corporation any of the powers and duties relating to, (a) the establishment, maintenance and operation of a registry described in clause 5 (2) (n); (b) the review of any nutrient management plans or nutrient management strategies; (c) the issuing, amending, suspending or revoking of certificates, licenses and approvals; or *(d)* the doing of any other prescribed work, other than for the purposes of Part IV, V or VI.

47 By-law superseded 60(1) A regulation supersedes a by-law of a municipality or a provision in that bylaw if the by-law or provision addresses the same subject matter as the regulation. By-law inoperative 60(2) a by-law or a provision of a by-law that is superseded under subsection (1) is inoperative while the regulation is in force.

48 Hansard, Statement to the Ontario Legislature, Hon. Elizabeth Witmer, May 2, 2001.

49 The regulation requires eligible facilities to provide the MOE with annual reports on their emissions of up to 358 pollutants and reports on their emissions of criteria air

contaminants during the smog season (May 1 to September 1).

[50] The prior regulation O. Reg 227/00 required polluters in the electricity sector to report their emissions of 28 different pollutants, provided that they were above the reporting thresholds. The regulation applied to generation facilities if they had a nameplate capacity of 1 megawatt or more, and not all the electricity generated by the facility (under 90%) was used on the same site on which the facility was located. If any facilities had thermal generation unit(s) of more than 25 megawatts annually and were above the annual reporting thresholds for SO2 and NOx, these facilities were also required to submit quarterly reports. To do this, it was mandatory for facilities to use Continuous Emissions Monitoring (CEM) devices and facilities were required to state exactly how much electricity they generated over the year, as well as their fuel use for combustion processes.

[51] Section 8 of O. Reg. 127/01 states that even if a facility classified as an electricity generator were not obliged to submit a report due to screening criteria and reporting thresholds, it must still submit an annual report on June 1st of every year which states how much electricity is produced at the facility during the calendar year that the report is referring to, as well as the types of energy sources used to produce electricity at the generation. Furthermore, if a generation facility submits a quarterly report, it must include information on the types of energy sources used by each discharge unit to produce electricity, and the average emission rate of NOx and sulphur dioxide from each of these discharge units during the quarter, in kilograms per megawatt hour

[52] EBR Registry Number: RA00E0005: Guideline for the Environmental Screening Process for Electricity Projects, March 2001

[53] See the EBR posting on August 10, 2001 at http://204.40.253.254/envregistry/016790ep.htm or download a copy of the guidelines from http://www.mnr.gov.on.ca/MNR/waterpower/p. 6.

[54] The "New Public Management" Comes to Ontario, A Study of Ontario's Technical Standards and Safety Authority and the impacts of putting public safety in private hands, CIELAP, 1999.

[55] Ibid., p. 54.

[56] Ibid., p. 54

[57] (Law Society of Upper Canada Conference Proceedings: Administrative Law: Dramatic Departures in a Downsizing State citing David Mullan at (1-7) (Toronto, December 12, 1997), quoted in TSSA at p. 55.

[58] *Eldridge v. British Columbia (Attorney General)*, [1998] 1 W.W.R. 50, (1997), 151 D.L.R. (4th) 577 (S.C.C.).

[59] Ibid. para 42.

[60] TSSA, p. 65

[61] *Lewis (Guardian ad litem of) v. British Columbia,* (1997), D.L.R. 4th 594 (SCC).

Chapter 2 – Water

[1] Canadian Institute for Environmental Law and Policy, *Ontario's Environment and the Common Sense Revolution: A Fifth Year Report* (Toronto: CIELAP, 2000) at 16-18 [hereinafter *CIELAP Fifth Year Report*].

[2] O. Reg. 459/00, s. 3.

[3] *Ibid.*, s. 4.

[4] *Ibid.*, s. 5.

[5] *Ibid.*, s. 6 (disinfection and chlorination requirements under section 5, for example, do not apply if an approval granted after August 1, 2000 provides that they are not required. This exemption from such requirements, in turn, only applies if the source water is exclusively groundwater and the application for approval includes certain information such as a municipal resolution approving the application, written consent of the medical officer of health, 24 months of water sampling and analysis, a hydrogeology report assessing the aquifer, well, wellhead protection, and the impact of existing and anticipated land uses, public notice, comment, and applicant responses, confirmation that for each well in the water treatment and distribution system, standby disinfection equipment and chemicals are available).

[6] *Ibid*., s. 7.

[7] *Ibid*., s. 8.

[8] *Ibid*., ss. 9-10.

[9] *Ibid*., s. 11.

[10] *Ibid*., s. 12.

[11] *Ibid*., s. 13.

[12] K. Harries, "Water Tragedy Spurred Ministry to Take Action" *The Toronto Star* (11 May 2001) A4 (noting that MOE worked for five years prior to the Walkerton tragedy to revise water quality guidelines yet still had not completed the task but within three months of May 2000 the guidelines had become enforceable regulations).

[13] Ontario Water Works Association and Ontario Municipal Water Association, *Walkerton Inquiry, Part II: Review of Issue # 5 - Drinking Water Standards* by Dr. L. Gammie (Toronto: OWWA/OMWA, 2001) at 31 [hereinafter Gammie] (noting that the Ontario Drinking Water Standards compare favourably with those in the rest of Canada and are on a par with international regulations).

[14] Ontario Water Works Association and Ontario Municipal Water Association, *Walkerton Inquiry, Part II: Review of Issue # 7 - Measurement of Source and Finished Water Quality* by Dr. E. Hargesheimer (Toronto: OWWA/OMWA, 2001) at 22-24 (noting that MOE sampling requirements for turbidity, particle counting, and chlorine residual measurements incorporated by reference into the new regulations deviate significantly from standard methods).

[15] O.C. 1170/2000 (*The Public Inquiries Act*). See also Ontario Ministry of the Attorney General, Press Release, "O'Connor Inquiry to Explore All Matters Necessary to Ensure Drinking Water Safety" (13 June 2000).

[16] Walkerton Inquiry, transcript of testimony of John Earl,

endnotes

MOE Senior Environmental Abatement Officer, October 30, 2000, at 14-15.

17 Walkerton Inquiry, transcript of testimony of Larry Struthers, MOE Environmental Officer, October 26, 2000, at 34-38, 48, 52-53.

18 Walkerton Inquiry, transcript of testimony of Phil Bye, MOE District Supervisor, October 25, 2000, at 105-106, 118-119, 124-125.

19 Walkerton Inquiry, transcript of testimony of Phil Bye, MOE District Supervisor, November 14, 2000, at 278-285.

20 Walkerton Inquiry, transcript of testimony of Robert Shaw, MOE Regional Director, April 17, 2001, at 105-132, 137.

21 Walkerton Inquiry, transcript of testimony of Robert Shaw, MOE Regional Director, April 23, 2001, at 22-55 (commenting on memoranda prepared by Sheila Willis, MOE Assistant Deputy Minister).

22 Walkerton Inquiry, transcript of testimony of Dr. Chuck Le Ber, Ontario Ministry of Health, Senior Veterinary Consultant, May 8, 2001, at 284-286, 297-300, 310-317.

23 Walkerton Inquiry, transcript of testimony of Grant Hopcraft, Deputy City Solicitor, City of London and Larry Clay, Director, Municipal Support Services, Ontario Ministry of Municipal Affairs and Housing, June 4, 2001, at 42-53, 66, 69 (commenting on the recommendations adopted by the province from the "Who Does What" Committee chaired by David Crombie).

24 Walkerton Inquiry, *Machinery of Government for Safe Drinking Water in Ontario* (Discussion Paper) by N. d'Ombrain (Toronto: Walkerton Inquiry, 2001) at 10 [hereinafter d'Ombrain].

25 *Ibid.* at 67.

26 *Ibid.* at 68 (reporting on findings of provincial auditor).

27 *Ibid.* at 72.

28 *Ibid.* at 107.

29 *Ibid.* at 115-117.

30 Ontario Public Service Employees Union, *Renewing the Ministry of the Environment: Submissions Concerning Part II of the Walkerton Inquiry* (Toronto: OPSEU, 2001) at 52.

31 *Ibid.* at 54-56, 61.

32 *Ibid.* at 53, 56, 60.

33 *Ibid.* at 59-61.

34 *Ibid.* at 58-60.

35 *Ibid.* at 54, 57.

36 Walkerton Inquiry, *Drinking Water Services: A Functional Review of the Ontario Ministry of Environment* by J. Merritt & C. Gore (Toronto: Walkerton Inquiry, 2001) at 96 [hereinafter Merritt & Gore].

37 *Ibid.*

38 *Ibid.* at 95, 97.

39 Walkerton Inquiry, *Experts' Tour Report* by E.E. Geldreich & J.E. Singley (Toronto: Walkerton Inquiry, 2001) at 15.

40 *Ibid.* at 23,

41 d'Ombrain, *supra* note 24 at 100 (noting that Ontario needs to overhaul and enlarge the scope of its drinking water safety legislation. See also Merritt & Gore, *supra* note 36 at 98 (noting that drinking water safety needs to be separated from the concept of "environmental protection and prevention" through the establishment of a comprehensive Drinking Water Act).

42 See *e.g.* Canadian Environmental Law Association and Concerned Walkerton Citizens, *Tragedy on Tap: Why Ontario Needs a Safe Drinking Water Act - Submissions to the Walkerton Inquiry, Part II*, vols. I, II (Toronto: CELA, 2001) [hereinafter CELA/CWC]; Association of Municipalities of Ontario, Municipal Electric Association, and Ontario Good Roads Association, *Submissions to the Walkerton Inquiry - Part II in Preparation for Public Hearing # 1: Guiding Principles, Overall Government Role, First Nations* (Toronto: AMO/MEA/OGRA, 2001) at 9 (a Safe Drinking Water Act should provide an enabling framework that allows municipalities of all sizes to deliver affordable, safe drinking water).

43 Ontario Ministry of the Environment, *Drinking Water Protection (Schools, Day Nurseries, Health and Day Care Facilities): Notice of Proposal for Regulation*, EBR Registry No. RA01E0013 (2001).

44 Gammie, *supra* note 13 at 31.

45 CELA/CWC, *supra* note 42 at vol. II, Appendix I: Comparative Parameter Chart (noting parameters not listed in O. Reg. 459/00 that appear in the standards or guidelines of Canada, other countries, or international bodies).

46 See *e.g.* Ontario Water Works Association and Ontario Municipal Water Association, *Walkerton Inquiry, Part II: Intended Submissions on Governance Matters Relating to the Provision of Safe Drinking Water in Ontario* by J.F. Castrilli (Toronto: OWWA/OMWA, 2001) at 30; Sierra Legal Defence Fund, *A Paper on the Regulatory Approaches to Drinking Water Used in Canada and, Selectively, Abroad: Prepared for the Walkerton Inquiry* by R.L. Christensen & E. Christie (Toronto: SLDF, 2001) at 16.

47 Ontario Ministry of Municipal Affairs and Housing, News Release "*Oak Ridges Moraine Act* Passed" (13 December 2001).

48 CELA/CWC, *supra* note 42 at vol. II: 128-132.

49 Ontario Water Works Association and Ontario Municipal Water Association, *Training and Accreditation of Water Supply Professionals: Prepared for the Walkerton Inquiry, Part II* by G.B. Samuel (Toronto: OWWA/OMWA, 2001) at 23-24, 26-32.

50 Ontario Water Works Association and Ontario Municipal Water Association, *Walkerton Inquiry, Part II: Review of Issue # 12 - Communications* by J.A. MacDonald (Toronto: OWWA/OMWA, 2001) at 7-15.

51 Ontario Water Works Association and Ontario Municipal Water Association, *Walkerton Inquiry, Part II: Review of Issue # 8 - Production and Distribution of Drinking Water* by J.A. MacDonald (Toronto: OWWA/OMWA, 2001) at 32-34.

52 Ontario Water Works Association and Ontario Municipal Water Association, *Walkerton Inquiry, Part II: Review of*

Various Papers Regarding Financial Matters by G. Scandlan (Toronto: OWWA/OMWA, 2001) at 2-2, 2-3, 3-2, 5-1, 5-2. See also Ontario Water Works Association and Ontario Municipal Water Association, *Walkerton Inquiry, Part II: Final Submissions Relating to the Provision of Safe Drinking Water in Ontario* (Toronto: OWWA/OMWA, 2001) at 50-53.

[53] Ontario Ministry of Municipal Affairs and Housing, News Release "Government Acts to Ensure Safe and Sustainable Water Services in Ontario" (12 December 2001).

[54] See *e.g.* d'Ombrain, *supra* note 24 at 109-111.

[55] Walkerton Inquiry - Part II, *Provincial Regulation of Drinking Water Safety I: Notes from Expert Meeting # 6* (22-24-May 2001) at 4 (noting that there was widespread agreement during this meeting of experts of the various parties to Part II of the Inquiry that MOE should be retained as the lead agency for policy and standard setting). See also Walkerton Inquiry - Part II, transcript of submissions of Peter Wallace, Government of Ontario, July 12, 2001, at 249 (noting that provincial government accepts that MOE is the lead ministry for drinking water).

[56] Walkerton Inquiry, *Effective Policy Regimes for the Management of Non-Point Source Water Pollution: Ontario and the US in Comparative Perspective* by Dr. C.M. Johns (Toronto: Walkerton Inquiry, 2001) at 2.

[57] Environmental Protection Agency, *National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations: Proposed Rule* 66 Fed.Reg. 2960 (2001) (to be codified at 42 C.F.R. Parts 122 and 412).

[58] *Ibid.* at 2983 (noting that a May 2000 outbreak of *E. coli* O157:H7 in Walkerton, Ontario resulted in at least seven deaths and 1,000 cases of intestinal problems; public health officials theorize that flood waters washed manure contaminated with *E. coli* into the town's drinking water well).

[59] Ontario Water Works Association and Ontario Municipal Water Association, *Walkerton Inquiry, Part II: Review of Issue # 6 - The Management of Manure and Non-Point Source Contamination of Water Quality in Ontario* by B. Pett (Toronto: OWWA/OMWA, 2001) at 13-14. See also International Joint Commission, *Pollution in the Great Lakes Basin from Land Use Activities: A Report to the Governments of the United States and Canada* (Ottawa & Washington, D.C.: IJC, 1980); and International Joint Commission, International Reference Group on Great Lakes Pollution from Land Use Activities (PLUARG), *Environmental Management Strategy for the Great Lakes System* (Windsor: IJC, 1978).

[60] Commissioner of the Environment and Sustainable Development, *A Legacy Worth Protecting: Charting a Sustainable Course in the Great Lakes and St. Lawrence River Basin: Report to the House of Commons* (Ottawa: Public Works and Government Services Canada, 2001) at Chapter 1: 149-151 [hereinafter CESD].

[61] Environmental Commissioner of Ontario, *The Protection of Ontario's Groundwater and Intensive Farming: Special Report to the Legislative Assembly of Ontario* (Toronto: ECO, 2000) at 9 [hereinafter ECO I].

[62] Ontario Ministry of Agriculture, Food and Rural Affairs, *Discussion Paper on Intensive Agricultural Operations in Rural Ontario* (Toronto: OMAFRA, 2000) at 2-3, 5 (noting that larger livestock facilities, and the increasingly common geographic concentration of single industry operations, such as hog farms raises concerns about potential damage to the environment; the commonly held view is that these more corporate operations make management decisions with less consideration for environmental stewardship; and that the main concerns are that surface and groundwater will be negatively effected in terms of both quality and quantity).

[63] Ontario Ministry of Agriculture, Food and Rural Affairs, *Task Force on Intensive Agricultural Operations in Rural Ontario Consultation* (Toronto: OMAFRA, 2000) [hereinafter *Task Force*].

[64] Bill 81, *An Act to Provide Standards with respect to the Management of Nutrients Used on Lands, etc.*, 2nd Sess., 37 Leg., Ontario, 2001 (1st reading 13 June 2001).

[65] *Ibid.*, ss. 5-6.

[66] Pett, *supra* note 59.

[67] Bill 81, *supra* note 64 at s. 60.

[68] See *e.g. Re Edwardsburgh (Township) Interim Control By-law 2000-07*, [2001] O.M.B.D. No. 650 (O.M.B.) at paras. 12-13 (upholding interim control by-law under section 34 of the *Planning Act* that placed animal unit restrictions on owner of intensive hog operation on grounds that because a use is described by size does not mean that the by-law is unlawful regulation rather than a lawful prohibition). But see *Ben Gardiner Farms Inc. v. West Perth (Township)*, (2001), 37 C.E.L.R. (N.S.) 189 (Ont. Div. Ct.) at 191-194 (granting leave to appeal of a zoning by-law enacted under section 34 of the *Planning Act* that restricted the establishment and operation of a large livestock operation on the basis of size on grounds that the by-law constituted a regulation not a prohibition on land use activity).

[69] Association of Municipalities of Ontario, Municipal Electric Association, and Ontario Good Roads Association, *Submissions to the Walkerton Inquiry - Part II in Preparation for Public Hearing # 5: Regulatory and Technical Issues for Specific Sources of Contamination; Water Quantity* (Toronto: AMO/MEA/OGRA, 2001) at 2 (noting concern that if Bill 81 is interpreted to mean that it supercedes all municipal powers that impinge on agricultural operations, local planning and zoning authority to protect local water sources from agricultural operations will be lost). See also R. Brennan, "Municipalities May Lose Right to Block Factory Farms" *The Toronto Star* (6 September 2001) A6 (referring to statement of provincial agricultural minister that Bill 81 will supercede anything in place now).

[70] Ontario Ministry of Agriculture, Food and Rural Affairs, News Release "New Ontario Legislation Will Protect Water and Set Clear Standards for Farms" (13 June 2001).

[71] *Ibid.* at 4.

[72] *Ibid.*

[73] *National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations*, 40 C.F.R. § 122.23(c) (1974).

[74] Environmental Commissioner of Ontario, *Ontario's Permit to Take Water Program and the Protection of Ontario's Water Resources: Brief to the Walkerton Inquiry* (Toronto: ECO, 2001) at 1 [hereinafter ECO II].

[75] *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, s. 34 (exceptions to permit requirements over 50,000 litres a day are for emergency, domestic, and livestock water purposes).

[76] ECO II, *supra* note 74 at 8.

[77] *Ibid*. at 1.

[78] *Ibid*. at i-ii. See *Water Taking and Transfer Regulation*, O. Reg. 285/99.

[79] *Ibid*. at ii.

[80] *Ibid*. at 25.

[81] *Dillon v. Ontario (Director, Ministry of Environment)*, (2000), 36 C.E.L.R. (N.S.) 141 at 153 (O.E.A.B.).

[82] *Ibid*. at 152.

[83] Ontario Ministry of Municipal Affairs and Housing, Media Backgrounder "Ensuring a Safe, Clean Water Supply for Ontario" (12 December 2001) (noting that the province is providing $10 million in funding for new groundwater studies and has launched a provincial groundwater monitoring network).

[84] Canadian Environmental Law Association, *Model Bill: An Act to Conserve Ontario Waters* by J.F. Castrilli (Toronto: CELA, 2001) [hereinafter *Model Bill*].

[85] *Ibid.*, s.2. See also Canadian Environmental Law Association, *Commentary for An Act to Conserve Ontario Waters* by J.F. Castrilli (Toronto: CELA, 2001) at 2 [hereinafter *Commentary*].

[86] *Model Bill*, *supra* note 84 at Part I, ss. 4.1-4.7.

[87] *Ibid*., Part I.I, ss. 5-9.1.

[88] *Ibid.*, Part II, s. 11.

[89] *Ibid*. Part II, ss. 12-12.1.

[90] *Ibid.*, Part II, ss. 14-15.

[91] *Ibid.*, Part III, ss. 16-17.

[92] *Ibid.*, Part IV, s. 20.

[93] *Ibid.*, Part V, ss. 21-28.

[94] Letter from S. Miller, Co-ordinator, Canadian Environmental Law Association to the Hon. D.R. O'Connor, Commissioner, Walkerton Inquiry (23 May 2001).

[95] Council of Great Lakes Governors, Press Release "Great Lakes Governors and Premiers Sign Charter Annex" (18 June 2001). See also Council of Great Lakes Governors and Premiers, *Great Lakes Charter Annex: A Supplementary Agreement to the Great Lakes Charter* (18 June 2001) [hereinafter Annex 2001].

[96] Council of Great Lakes Governors and Premiers, *Great Lakes Charter* (1985), Principle III.

[97] *Ibid.*, Principle IV.

[98] Annex 2001, *supra* note 95 at 1.

[99] Ontario Ministry of Natural Resources, News Release "Ontario Invites Public Comment on Proposed Annex to Great Lakes Charter" (14 December 2000).

[100] Canadian Institute of Environmental Law and Policy, *Ontario's Environment and the Common Sense Revolution: A Fourth Year Report* (Toronto: CIELAP, 1999) at 3-36 to 3-37 [hereinafter *CIELAP Fourth Year Report*].

[101] *CIELAP Fifth Year Report*, *supra* note 1 at 21.

[102] Great Lakes United, Press Release "Groups Worry About New Rules Allowing Diversions From Great Lakes" (14 December 2000).

[103] *CIELAP Fifth Year Report*, *supra* note 1 at 27.

[104] Letter from A. Mitchell, Executive Director, CIELAP to the Hon. Dan Newman, Ontario Minister of the Environment (31 March 2000).

[105] *Ibid*. at 2-3.

[106] International Joint Commission, *Tenth Biennial Report on Great Lakes Water Quality* (Ottawa & Washington, D.C.: IJC, 2000) at 48.

[107] *Constitution Act, 1867* (U.K.), 30 & 31 Vict., c. 3, ss. 92 (13), (16) reprinted in R.S.C. 1985, App. II, No. 5 (property and civil rights and matters of a merely local or private nature in the province are provincial responsibilities under the Constitution).

[108] Environmental Commissioner of Ontario, *Changing Perspectives: Annual Report 1999/2000* (Toronto: ECO, 2000) at 44 (targets to be met by the year 2000 or earlier included restoration of at least nine of 17 AOCs, restore 60 per cent of impaired beneficial uses in AOCs, increase and rehabilitate aquatic habitat, upgrade eight primary sewage treatment plants, remediate 20 provincial contaminated sites, and achieve a 90 per cent cut in the use, generation, and release of seven persistent toxic substances).

[109] *Ibid*. at 45 (only one AOC fully restored and delisted, 13 per cent of beneficial uses in AOCs restored, one sewage treatment plant upgraded to secondary treatment, and 70 per cent cut achieved in use, generation, and release of seven persistent toxic substances).

[110] *Ibid*. at 45-46.

[111] *Ibid.* at 7.

[112] *Ibid*. at 47.

[113] CESD, *supra* note 60 at 109-115.

[114] Her Majesty the Queen in Right of Canada and Her Majesty the Queen in Right of Ontario, *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem: Draft for Public Comment* (Ottawa & Toronto: DOE/MOE, 2001) [hereinafter COA].

[115] *Ibid.* at 4.

[116] *Ibid.* at 5.

[117] *Ibid.* at 6.

[118] *Ibid.*

[119] *Ibid.* at 7.

[120] *Ibid.* at 7-8.

[121] Her Majesty the Queen in Right of Canada and Her Majesty the Queen in Right of Ontario, *Areas of Concern Annex to the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem: Draft for Public Comment* (Ottawa & Toronto: DOE/MOE, 2001) art. I [hereinafter AOC Annex].

[122] *Ibid.*, art. II.1.

[123] The 1994 COA objective was to cleanup, restore, and delist nine of 17 AOCs by 2000.

[124] AOC Annex, *supra* note 121 at art. II.2.

[125] *Ibid.*, art. II.3.

[126] *Ibid.*, art. III.

[127] Ontario Ministry of the Environment, *The Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem: Notice of Proposal for Policy*, EBR Registry No. PA01E0023 (2001) (comment period ending November 28, 2001).

[128] *CIELAP Fifth Year Report*, *supra* note 1 at 29.

Chapter 3 – Air Quality and Monitoring in Ontario

[1] Ontario's Air: Years of Stagnation Ontario Medical Association, June, 2001

[2] Green Facts: Ontario's Smog Problem, Ministry of the Environment September, 1998

[3] According to MOE data, the Provincial Composite Mean of Annual Mean Nitrogen Oxide (NO_x) levels parts per billion (ppb) was 32.1 in 1995 and 32.9 in 1998. The Provincial Composite Mean of Annual Mean Carbon Monoxide (CO) levels in parts per million (ppm) where 0.5 in 1995 and 0.6 in 1998. The Provincial Composite Mean of the Annual Mean Ozone (O_3) Level in ppb was 23.4 in 1995 and 25.1 in 1998 1998 Air Quality Report Ministry of the Environment 2001

[4] For discussion on other government strategies introduced in previous years such as the Drive Clean program, refer to CIELAP's series of Ontario's Environment and the Common Sense Revolution:

[5] Government of Ontario, Direction for Change: Charting a Course for Competitive Electricity and Jobs in Ontario (November, 1997) . In this white paper introducing electricity competition, the government states that it "is firmly committed to maintaining and enforcing its standards for environmental protection", p. 20.

[6] Media Backgrounder: Improving Ontario's Air Quality Ministry of Environment March, 2001. Prior to new cap, OPG's regulated limit was 175 kt. The new limits to be introduced in 2002 and 2007 are 153.5 kt and 127 kt, respectively.

[7] Gibbons, Jack Weak Emissions Limits: An Assessment of Ontario's 2001 proposals for air-pollution control in the electricity sector (Toronto: Ontario Clean Air Alliance, May 2001)

[8] News Release: Canada and the United States Reach a Draft Agreement to Reduce Transboundary Smog: Statement by the Hon. David Anderson, Minister of the Environment, Environment Canada, October 13, 2000

[9] News Release: Ontario Power's greenhouse gas emissions exceeded its cap by 49% last year, Ontario Clean Air Alliance June 19, 2001

[10] Ontario Announces Bold Actions On Industry Emissions, Ministry of Environment News Release.

[11] Taking Stock 1998 North American Pollution Releases and Transfers North American Commission for Environmental Cooperation July, 2001

[12] See Gibbons, Jack OCAA Clean Air Report: Countdown Coal (Toronto: Ontario Clean Air Alliance, January 2001)

[13] Press Release: SW Ontario suffers while Toronto is spared Lambton and Nanticoke coal plants powered up on high smog days; Lakeview pollution declines Ontario Clean Air Alliance July 9, 2001

[14] Anti Smog Action Plan Progress Report Ministry of the Environment, August, 2000

[15] Press Release Cheapskate Lakeview coal conversion sacrifices GTA lungs, new report shows Ontario Clean Air Alliance, August 1, 2001

[16] See T.H. Tietenberg, "*Emissions Trading: An exercise in Reforming Pollution Policy*" (Washington DC, 1985, Resources for the Future) and C.W. Howe "*An Evaluation of US Air and Water Policies*" Environment (September 1991), 10

[17] Emissions Reduction Trading System for Ontario: A Discussion Paper Ontario Ministry of the Environment, March 2001

[18] McClean, Brian J. Correspondence with John Hutchison of the Ministry of the Environment. June 22,

[19] Poch, David "Comments of the Green Energy Coalition in response to Emissions Reduction Trading System for Ontario A Discussion Paper (issued March 2001)" Comments submitted June 21st, 2001 by David Poch, counsel to the Green Energy Coalition

[20] Ontario Announces Actions on Industry Emissions, supra fn. 10.

[21] See Airborne Emissions Monitoring and Reporting in Ontario: An Overview and Analysis, John Coelho, CIELAP, August 1, 2001.

[22] MOE employee, Personal Interview: July 20, 2001

[23] Dr. Keith Stewart, Personal Interview, Toronto Environmental Alliance July, 2001

[24] Barry Spiegel, Willms and Shier Environmental Lawyers, Personal Interview, July, 2001

[25] Dr. Keith Stewart, Toronto Environmental Alliance, Personal Interview, July, 2001

[26] MOE Employee, Personal Interview, July 2001

[27] Clark, Karen and Yacoumidis, James Ontario's Environ-

ment and the Common Sense Revolution: A Fifth Year Report. (Toronto: Canadian Institute for Environmental Law and Policy, 2000)

28 Media Backgrounder Ontario's Smog Plan: A Partnership For Action Ministry of the Environment January, 1998

29 Wellner, John A critical analysis of progress reported by Ontario's Anti-Smog Action Plan Partnership

(Toronto: Pollution Probe, October, 2000)

30 Ontario's Air: Years of Stagnation (Toronto: Ontario Medical Association, June, 2001)

31 Towards a Smog Plan for Ontario: Supporting Document, Ministry of Environment June 1996

32 Partners in Progress: ASAP Progress Report, Ministry of the Environment, August, 2000

33 Green Facts: Fine Particles Ministry of Environment, September, 1998

34 Ontario Smog Plan: A Partnership for Collective Action Ontario, Ministry of the Environment, January, 1998

35 Ontario Smog Plan: A Partnership for Collective Action Ontario Ministry of the Environment, January, 1998

36 Ontario's Anti Smog Action Plan: Progress Report August 2000 Ministry of the Environment, August 2000

37 Air Quality in Ontario, 1998 Ministry of the Environment, 2001

38 Ministry of the Environment http://www.airqualityontario.com/science/aqi_description.cfm

39 Ontario's Air: Years of Stagnation Ontario Medical Association, June, 2001

40 Transboundary Pollution and its Effects on Ontario Ministry of the Environment, August 24, 2000.

41 Wellner, John. A Critical Analysis of Progress Reporter by Ontario's Anti Smog Action Plan Partnership. Pollution Probe, October, 2000

42 Wellner, John. A Critical Analysis of Progress Reported by Ontario's Anti Smog Action Plan Partnership. Pollution Probe_ October, 2000

Chapter 4 – Hazardous Wastes and Brownfields

1 Canadian Institute for Environmental Law and Policy, *Ontario's Environment and the Common Sense Revolution: A Fifth Year Report* (Toronto: CIELAP, 2000) at 51.

2 Environment Canada, News Release, "Environment Minister Issues Call to Action to Better Manage Hazardous Waste Imports," (27 July 2000).

3 Environment Canada, Fact Sheet, "Hazardous Waste Management in Canada," (2000) at 2, online: Environment Canada < http://www.ec.gc.ca/press/ooo727_f_e.htm > (last updated: 27 July 2000) (imports for disposal in Ontario went from 174,000 tonnes in 1998 to 240,000 tonnes in 1999).

4 Environment Canada, Backgrounder, "Hazardous Waste Management in Canada," (2001) at 2-3, online: Environment Canada < http://www.ec.gc.ca/press/2001/010803_b_e.htm > (last updated: 3 August 2001) [hereinafter Environment Canada Backgrounder] (waste imports for landfilling in Ontario went from 195,000 tonnes in 1999 to 109,000 tonnes in 2000).

5 Environment Canada, News Release, "Imports of Hazardous Waste Decline in 2000," (3 August 2001).

6 Texas Center for Policy Studies, Canadian Institute for Environmental Law and Policy, and Proyecto Emisiones, *The Generation and Management of Hazardous Wastes and Transboundary Hazardous Waste Shipments Between Mexico, Canada and the United States 1990-2000* (Austin, Texas: TCPS, 2001) at 52 (waste imports to Ontario grew from 52,510 tons in 1991 to 325,000 tons in 1999, with particular acceleration after 1993).

7 *Ibid.* at 64.

8 *Ibid.* at 46-47.

9 M. Mittelstaedt, "Waste Sparks Bilateral Riff" *The Globe and Mail* (11 September 2001) A8.

10 Environment Canada Backgrounder, *supra* note 3 at 3.

11 "Time to Review Canada's Hazardous-Waste Imports" *The Globe and Mail* (28 June 2001) at A14

12 M. Mittelstaedt, "Canada Permits U.S. Waste to Flood in" *The Globe and Mail* (25 June 2001) at A1.

13 M. Nelson, "Neighbours of Toxic Dump Uneasy" *The Globe and Mail* (4 July 2001) at A3.

14 N. Bowen, "DiCocco Demands Ban on U.S. Hazardous Waste" *The Sarnia Observer* (26 June 2001) at A1.

15 *Fifth Year Report*, *supra* note 1 at 49-50.

16 Taro East Landfill Expert Panel, *Final Report* (Hamilton: Expert Panel, 2000) at 72, 75.

17 *Fifth Year Report*, *supra* note 1 at 49-51.

18 Canadian Institute of Environmental Law and Policy, *The New Ontario Hazardous Waste Regulations of 2000: Waste Identification and Protection of the Environment* by Joseph F. Castrilli (Toronto: CIELAP, 2001).

19 The old definition for leachate toxic waste defined such material as waste producing leachate containing any of the contaminants listed in Schedule 4 at a concentration in excess of one hundred times that specified in the Schedule using a test known as the Leachate Extraction Procedure ("LEP"), or an equivalent test method approved by MOE. As a result of the amendments to the regulation that came into force on March 31, 2001, a new definition and procedure for determining if waste is leachate toxic waste has been adopted by MOE. Under the amendments, a leachate toxic waste now means a waste producing leachate containing any of the contaminants listed in Schedule 4 at a concentration equal to or in excess of the concentration specified for that contaminant in Schedule 4 using a test procedure known as the Toxicity Characteristic Leaching Procedure ("TCLP") developed by the United States Environmental Protection Agency, or an equivalent test method approved by MOE. *Ibid.* at 9 n.35.

[20] The "derived from" rule applies to waste that is derived from a hazardous industrial waste (Schedule 1), an acute hazardous waste chemical (Schedule 2A), a hazardous waste chemical (Schedule 2B), a severely toxic waste, pathological waste, or radioactive waste. A waste is derived from a hazardous waste if it is produced from any of the above hazardous wastes through blending, stabilization, processing, treatment, or disposal. The "derived from" rule does not apply to characteristic hazardous wastes such as corrosive, ignitable, leachate toxic, or reactive waste. Therefore, a waste derived from one of these four waste categories is not deemed to be a hazardous waste. *Ibid*. at 9 n.36.

[21] The amendments identify three ways for a waste that would otherwise be captured by the "derived from" rule requirements to avoid regulation as a hazardous waste. First, if the waste that is derived from a hazardous waste is listed in exemption Schedules 1.1, 2.1, or 2.2 of the regulation. Second, if a formal "de-listing" has been received from the MOE for a specific waste, in which case the de-listed waste is placed in Schedules 1.1, 2.1, or 2.2. Third, if the waste that is derived from a hazardous waste is produced in accordance with a certificate of approval that states that, in the opinion of the MOE, the waste that is produced in accordance with the certificate of approval does not have characteristics similar to the characteristics of the hazardous waste from which it was derived. *Ibid*. at 9 n.37.

[22] The MOE updated its lists of hazardous wastes in Schedule 1(adding 58 to the current list of 96), Schedule 2A (adding 37 to current list of 206, and removing one current waste entry), and Schedule 2B (adding 37 to current list of 472, and removing two waste entries). The total number of new waste streams adding up to 129. *Ibid*. at 9 n.38.

[23] *Ibid*. at 33-36.

[24] O. Reg. 501/01, s. 2 (amending ss. 18(1)-(7.1-7.2) of Reg. 347 of R.R.O. 1990).

[25] *Ibid*. See also Hon. Elizabeth Witmer, *Minister's Requirement for Hazardous Waste Fees* (18 December 2001).

[26] Ontario Ministry of the Environment, Waste Management Policy Branch, *Pre-Treatment Requirements for Hazardous Wastes Prior to Land Disposal (Land Disposal Restrictions): Discussion Document* (Toronto: MOE, 2001).

[27] Ontario Ministry of the Environment, Notice of Proposal for Regulation, *Strengthening Ontario's Hazardous Waste Management Framework (Next Steps): EBR Registry No. RA1E0023* (18 December 2001).

[28] *Supra* note 24. See also Letter from M. Winfield, Pembina Institute for Appropriate Development to N. Dhaliwal, Waste Management Policy Branch, MOE (12 September 2001).

[29] Ontario Ministry of the Environment, News Release "Ontario Announces Comprehensive Hazardous Waste Plan" (18 December 2001) (noting that the regulation will help offset nearly $12 million of MOE's annual costs for managing and tracking hazardous wastes).

[30] Winfield, *supra* note 28 (commenting on the draft version of the regulation).

[31] National Round Table on the Environment and the Economy, *State of the Debate on the Environment and the Economy: Greening Canada's Brownfield Sites* (Ottawa: NRTEE, 1998) at 4. The discussion in Part III.A of this chapter is based on the NRTEE report. *Ibid*. at 4-10.

[32] See *e.g. Environmental Protection Act*, R.S.O. 1990, c. E.19, s. 17 (remedial orders).

[33] Ontario Ministry of the Environment and Energy, *Guideline for Use at Contaminated Sites in Ontario* (Toronto: Queen's Printer, 1997).

[34] *Ibid*. at i.

[35] *Ibid*. at ii-iii (discussion of background, generic, and site-specific assessment approaches).

[36] *Ibid*. at iv-v (discussion of investigation and restoration, record of site condition, notice, and certificate of prohibition issues).

[37] Brownfields Advisory Panel, *Brownfields Policy Review: Summary Advice* (Toronto: Ontario Government, 2000) at 2, 12 [hereinafter Brownfields Advisory Panel].

[38] Donna S.K. Shier & Barry N. Spiegel, "The Legal Framework" (Canadian Bar Association-Ontario: Conference on How Clean is Clean? Ontario's New Guideline for the Cleanup of Contaminated Sites, CBAO Continuing Legal Education and Meeting Centre, 13 September 1996) at 19-20.

[39] Association of Municipalities of Ontario Brownfields Taskforce, *Promoting Municipal Leadership in Brownfields Redevelopment: Recommendations in Support of the Provincial Review of Brownfields Policy* (Toronto: AMO, 2000) at 7 [hereinafter AMO Brownfields Taskforce].

[40] J.F. Castrilli, "Toxic Real Estate, Contaminated Lands, and Insurance" in E.L. Hughes, A.R. Lucas & W.A. Tilleman, eds., *Environmental Law and Policy*, 2nd ed. (Toronto: Emond Montgomery Publications, 1998) at 304-305. The discussion in Part III.B.2 of this chapter is based on this work.

[41] *Ontario (Ministry of the Environment & Energy) v. 724597 Ontario Inc. (c.o.b. Appletex)*, (1995), 26 O.R. (3d) 423 (Ont. Ct. Gen. Div. - Div. Ct.).

[42] J. Coop, "Beyond 'Appletex': The Status of 'Fairness' Litigation and the Challenges Posed by the Doctrine of 'Fairness'" (1996), 7 Journal of Environmental Law and Practice 115 at 145-148.

[43] *Re Karge*, (1997), 21 C.E.L.R. (N.S.) 5 (O.E.A.B.). Supplementary reasons for decision released May 23, 1997 [1997] O.E.A.B. No. 35.

[44] Bill 56, *An Act to Encourage the Revitalization of Contaminated Land and to Make Other Amendments Relating to Environmental Matters*, 2nd Sess., 37th Leg., Ontario, 2001 (1st reading 17 May 2001).

[45] W. Immen, "Waterfront Faces Toxic Time Bomb" *The Globe and Mail* (20 November 2000) A21 (noting 800 hectares of polluted and vacant waterfront land needed for Toronto 2008 Olympic bid). See also T. Boyle, "Proposed Law Aims to Ease Building on Blighted Land" *The Toronto Star* (3 March 2001) A14 (noting that on the eve

of a visit from the International Olympic Committee the province announced that it will limit the liability faced by developers of abandoned and polluted industrial sites).

46 R. Brennan, "Toxic Lands Targeted in Redevelopment Study" *The Toronto Star* (21 September 2000) A8 (noting comments of then Minister of Municipal Affairs and Housing, the Hon. Tony Clement, that up to 15 per cent of land in Hamilton and Toronto falls into category of brownfields, and that it makes more sense to redevelop existing land than eat up farmland). See also Editorial, "Olympic Site Not Alone in Needing a Cleanup" *The Toronto Star* (29 May 2001) A22 (noting that Greater Toronto has approximately 4,500 hectares of contaminated lands).

47 Brownfields Advisory Panel, *supra* note 37 at 1.

48 *Ibid.* at 2.

49 *Ibid.* at 12-13.

50 *Ibid.* at 13-21.

51 *Ibid.* at 7.

52 *Ibid.* at 7-11.

53 *Ibid.* at 8.

54 *Ibid.* at 4.

55 *Ibid.* at 4-5.

56 AMO Brownfields Taskforce, *supra* note 39 at 13.

57 *Ibid.* at 6-11.

58 *Ibid.* at 4.

59 Ontario Ministry of Municipal Affairs and Housing, News Release Backgrounder, "Brownfields Statute Law Amendment Act, 2001" (17 May 2001).

60 *Ibid.* See also Ontario Ministry of Municipal Affairs and Housing, News Release, "Statement to the Legislature by the Hon. Chris Hodgson on Smart Growth" (17 May 2001). See especially Ontario Ministry of the Environment and the Ontario Ministry of Municipal Affairs and Housing, *Brownfields Statute Law Amendment Act, 2001*, (2001), online: Ontario Ministry of the Environment < http://www.ene.gov.on.ca/envregistry/015941ea.htm > (date accessed: 23 May 2001).

61 Bill 56, *An Act to Encourage the Revitalization of Contaminated Land and to Make Other Amendments Relating to Environmental Matters*, 2nd Sess., 37th Leg., Ontario, 2001, Part II proposing new Part XV.1, ss. 168.4-168.6, 168.10 (37) (1st reading 17 May 2001).

62 *Ibid.*, Part II proposing new Part XV.2, ss. 168.13-168.17, 168.18-168.23, 168.24, 168.27 and Part II proposing new Part XV.1, ss. 168.7-168.8.

63 *Ibid.*, Part II proposing new Part XV.1, ss.168.4, 176 (amended).

64 T. Van Alphen, "Environmental Consultant Falsified Tests, ORC Says" *The Toronto Star* (29 July 2000) A24 (allegations of falsified soil quality testing on Crown-held contaminated real estate properties).

65 Bill 56, *An Act to Encourage the Revitalization of Contaminated Land and to Make Other Amendments Relating to Environmental Matters*, 2nd Sess., 37th Leg., Ontario, 2001, Part VII, ss. 7(2), (4.1), (7), (7.1) (1st reading 17 May 2001).

66 *Ibid.*, Part IV, ss. 4(12), 17.1.

67 *Ibid.*, Part III, s. 442.7(2).

68 Ontario, Legislative Assembly, Debates, LO22 (31 May 2001) at 53-55 (Mr. Hodgson), 61-63 (Mr. Clark).

69 *Ibid.* at 66-69 (Mr. McMeekin).

70 Ontario, Legislative Assembly, Debates, LO23B (4 June 2001) at 12-13 (Mr. Bradley). See also Ontario, Legislative Assembly, Debates, LO24B (5 June 2001) at 18-20, 22 (Mr. Gerretsen).

71 Ontario, Legislative Assembly, Debates, LO24B (5 June 2001) at 17 (Mr. Gerretsen).

72 Ontario, Legislative Assembly, Debates, LO23B (4 June 2001) at 19 (Ms. Di Cocco).

73 Ontario, Legislative Assembly, Debates, LO24B (5 June 2001) at 6 (Mr. Marchese).

74 *Ibid.* at 3-4 (Mr. Bradley).

75 See e.g. Fran Carnerie, Case Comment on *King v. Rolex* - Private Law Duties and Private Interests: The Role of Mortgagees in Waste Removal" (1992), 9 C.E.L.R. (N.S.) 1 (concerns expressed by an MOE lawyer as to whether it is in the public interest to have government cleanup a property with tax dollars and then allow a mortgagee to reap the benefits by selling the property at a vastly improved price).

Chapter 5 – Compliance and Enforcement: The New SWAT Team

1 Daniel Sitarz, ed., *Agenda 21: The Earth Summit Strategy to Save Our Planet*, (London: Earthpress, 1993) at 248-250.

2 *North American Agreement on Environmental Cooperation*, Canada, Mexico, and the United States, 13 September 1993, 1994 Can. T.S., art. 3(1).

3 *Ibid.*, art. 5(1)(a)-(l). Such efforts to enforce environmental laws may include: (a) appointing and training inspectors; (b) monitoring compliance and investigating suspected violations, including through on-site inspections; (c) seeking assurances of voluntary compliance and compliance agreements; (d) publicly releasing non-compliance information; (e) issuing bulletins or periodic statements on enforcement procedures; (f) promoting environmental audits; (g) requiring record keeping and reporting; (h) providing or encouraging mediation and arbitration services; (i) using licences, permits, or authorizations; (j) initiating, in a timely manner, judicial, quasi-judicial, or administrative proceedings to seek appropriate sanctions or remedies for violations of environmental laws and regulations; (k) providing for search, seizure, or detention; or (l) issuing administrative orders, including orders of a preventive, curative, or emergency nature. *Ibid.*

4 The summary definitions for "compliance" and "enforce-

ment" contained in this paragraph are based on J.F. Castrilli "Canadian Policy and Practice with Indicators of Effective Environmental Enforcement" in (Indicators of Effective Environmental Enforcement: Proceedings of a North American Dialogue, Commission for Environmental Cooperation, May 7-8, 1998) (Montreal: CEC, 1999) at Annex 3.

5 Walkerton Inquiry, transcript of testimony of Erv McIntyre, former MOE Director of Approvals, March 6, 2001, at 72-76 (implied conditions could include the application, documents, correspondence, agreements reached, and related material).

6 Walkerton Inquiry, transcript of testimony of Gordon Robertson, MOE Investigator, April 24, 2001, at 121 (noting that it was not uncommon for older certificates of approval to not have any conditions attached).

7 McIntyre, *supra* note 5 at 75-76.

8 *Ibid.* at 76 (concern that MOE viewed by public as a "soft" ministry that needed to toughen its image). Public concern with environmental problems in the province in the 1970s had resulted in calls for major law reforms. See J.F. Castrilli, "Environmental Rights Statutes in the United States and Canada: Comparing the Michigan and Ontario Experiences" (1998) Vill. Env. L.J. 349 at 362-368.

9 McIntyre, *supra* note 5 at 76. See also Walkerton Inquiry, transcript of testimony of William Gregson, former MOE Approvals Branch Manager, March 6, 2001, at 85.

10 *Harwich Township v. Ridge Landfill Corporation Ltd. and the Minister of the Environment* (1981), 10 C.E.L.R. 148 (Ont. Div. Ct.).

11 The testimony of MOE Approvals Branch witnesses during the Walkerton Inquiry was that conditions of approval began to be added to certificates of approval in the mid-1980s to facilitate MOE District office functions, such as compliance activities. However, MOE witnesses did not attribute this to the change in government in 1985.

12 *Environmental Protection Act*, R.S.O. 1990, c. E.19, s. 156 (authorizing inspections regarding discharges to the natural environment; reviewing documentation relating to, and ensuring compliance with, approvals or the regulations, etc.).

13 Ontario Ministry of the Environment and Energy, *Report on the 1991 Industrial Direct Discharges in Ontario: Summary of Compliance Assessment*, vol. 1 (Toronto: Queen's Printer, 1993) at 1 (noting that an industrial direct discharger would be out of compliance if its effluent concentration or discharge loadings exceed one or more of the parameters contained in its effluent requirements. Any exceedance, even minor, would cause the discharger to be deemed out of compliance.).

14 *Ibid.* at 3, 9-11. See also Ontario Ministry of the Environment and Energy, *Report on the 1991 Industrial Direct Discharges in Ontario: Data for Individual Plant Performance*, vol. 2 (Toronto: Queen's Printer, 1993). The compliance assessment reports provided an overall assessment of industry compliance province-wide, as well as on a discharger-by-discharger basis. These reports provided (1) data showing actual monthly and annual average pollutant loadings for each discharger, (2) effluent requirements for each discharger, (3) information on the compliance performance for each discharger over the previous three years, (4) industry actions to address non-compliance situations, and (5) MOE actions taken in response to an occurrence report of a violation of a legal requirement.

15 D. Saxe, *Environmental Offences: Corporate Responsibility and Executive Liability*, (Toronto: Canada Law Book, 1990) at 29-30.

16 Walkerton Inquiry, Transcript of testimony of Julian Wieder, MOE IEB Program Manager, April 24, 2001, at 21-24.

17 *Ibid.* at 45. See also McIntyre, *supra* note 5, at 85-86. See especially Walkerton Inquiry, transcript of testimony of McIntyre, March 7, 2001, at 113.

18 Saxe, *supra* note 15 at 30.

19 Canadian Institute for Environmental Law and Policy, *Ontario's Environment and the Common Sense Revolution: A Fourth Year Report* (Toronto: CIELAP, 1999) at 1-8 [hereinafter *CIELAP Fourth Year Report*].

20 Saxe, *supra* note 15 at 53.

21 Wieder, *supra* note 16 at 188-189.

22 Walkerton Inquiry, transcript of testimony of Nancy Johnson, former MOE IEB Investigator, April 24, 2001, at 165-166.

23 Canadian Institute for Environmental Law and Policy, *Ontario's Environment and the Common Sense Revolution: A Fifth Year Report* (Toronto: CIELAP, 2000) at 7 [hereinafter *CIELAP Fifth Year Report*] (noting that since the advent of the Harris government in 1995, MOE budgets have been cut by approximately 60 percent, based on the combined cuts to capital and operating expenses).

24 *CIELAP Fourth Year Report*, *supra* note 18 at Appendix B: A.4-A.16.

25 *Ibid.* See also Johnson, *supra* note 21 at 148-149 (noting MOE move back by 1996 to pre-1985 voluntary compliance culture but without the same resources).

26 Provincial Auditor of Ontario, *2000 Annual Report* (Toronto: Queen's Printer, 2000) [hereinafter Provincial Auditor].

27 Environmental Commissioner of Ontario, *Having Regard: 2000-2001 Annual Report* (Toronto: ECO, 2001) [hereinafter ECO].

28 See generally Provincial Auditor, *supra* note 25 at Chapter 3.06.

29 ECO, *supra* note 26 at 10, 83.

30 *CIELAP Fourth Year Report*, *supra* note 18 at 2-24.

31 *CIELAP Fifth Year Report*, *supra* note 22 at 10.

32 Ontario Ministry of the Environment, News Release "Environmental Fines Up Sharply in 2000" (29 December 2000) (noting that total fines in 1999 were $1.5 million and in 2000 were $2.6 million)[hereinafter MOE News Release].

33 See generally Provincial Auditor, *supra* note 25 at Chapter 3.06.

endnotes

[34] MOE News Release, *supra* note 31.

[35] Sierra Legal Defence Fund, *Ontario Yours to Pollute* (Toronto: SLDF, 2001).

[36] *CIELAP Fourth Year Report*, *supra* note 18 at 2-24.

[37] Walkerton Inquiry, transcript of testimony of Julian Wieder, MOE IEB Program Manager, April 25, 2001, at 62.

[38] *Ibid*.

[39] Walkerton Inquiry, transcript of testimony of Gordon Robertson, MOE IEB Investigator, April 24, 2001, at 185 (noting that post-1995 the value of enforcement seemed to be minimized within MOE).

[40] Ontario Ministry of the Environment, News Release "Ontario Launches Major Offensive Against Polluters" (21 September 2000). See also Ontario Ministry of the Environment, Media Backgrounder "Environmental SWAT Team" (21 September 2000).

[41] *R. v. Sault Ste. Marie (City)*, [1978] 2 S.C.R. 1299

[42] Government of Ontario, News Release "Harris Government's 21-Step Action Plan" (2 May 2001) (appending Statement to the Ontario Legislature by the Hon. Elizabeth Witmer, Ontario Minister of the Environment).

[43] Ontario Ministry of the Environment, News Release "Environmental SWAT Team Fully Deployed: Permanent Unit Cracks Down on Septic Waste Haulers" (25 June 2001). See also Ontario Ministry of the Environment, Media Backgrounder "Ontario's Environmental SWAT Team" (25 June 2001).

[44] *The Environmental SWAT Team*, online: Ontario Ministry of the Environment < http://www.ene.gov.on.ca/envision/swat/index.htm > (last modified: 11 September 2001). The SWAT website did not appear online until mid-November 2001.

[45] *Supra* note 43.

[46] *SWAT: Inspections - Septic Waste Haulers*, online: Ontario Ministry of the Environment < http://www.ene.gov.on.ca/envision/swat/septic.htm > (last modified: 11 September 2001). See also Ontario Ministry of the Environment, News Release "Environmental SWAT Team Orders 123 Septic Waste Haulers to Take Corrective Action" (20 December 2001).

[47] Ontario Ministry of the Environment, News Release "Environmental SWAT Team Cracks Down on Non-Compliant Electro/Metal Platers" (28 August 2001). See also Ontario Ministry of the Environment, Media Backgrounder "The Environmental SWAT Team Inspects Electro/Metal Platers" (28 August 2001).

[48] Ontario Ministry of the Environment, Media Backgrounder "The Environmental SWAT Team Inspects Septic Waste Haulers" (20 December 2001).

[49] *Inspection Results*, online: Ontario Ministry of the Environment < http://www.ene.gov.on.ca/envision/swat/work/table1.htm > (last modified: 11 September 2001).

[50] Other compliance and enforcement "outcomes" may include such matters as rate of repeat offences, progress in returning chronic and significant violators to compliance, etc.

[51] Canadian Institute for Environmental Law and Policy, *Freedom of Information Act* questions on the Ontario Ministry of the Environment SWAT Team regarding activities since the inception of the Team in September 2000 (August 2001):

GENERAL

- What has been the budget for the SWAT Team per year since its inception in September 2000? What is it projected to be for each of the next three years?
- How many people are on the SWAT team by position? (e.g. number of inspectors, investigators, program analysts, scientists, laboratory technicians, engineers, etc.).
- What level are they at (ex. EO4)?
- How many of these positions (by category) are permanent? How many of these positions (by category) are being staffed by contract personnel?
- What areas (geographically) has the SWAT Team worked in already? Are there areas that they have specifically targeted?
- How long have they been operating?
- What are they targeting (i.e. working to quotas; focus on particular industrial sectors, or particular environmental media, etc?)
- Other information as available.

OUTPUTS

- Statistics on the number of inspections to date.
- Statistics on the number of investigations conducted to date.
- Statistics on the number of warnings issued to date.
- Statistics on the number of orders issued to date.
- Statistics on the number of prosecutions initiated to date.
- Statistics on the number of convictions obtained to date (if court decisions and reasons available, please provide).
- Statistics on the quantum of fines or penalties assessed to date.
- Statistics on the number of offenders jailed to date.
- Other information as available including that analyzing the above.

OUTCOMES

- Statistical or other information available on progress in returning chronic, repeat, or significant offenders to compliance as a result of compliance or enforcement efforts.
- Statistics on rate of recidivism (repeat offences) among significant or chronic offenders following compliance or enforcement efforts.
- Overall statistics on compliance rates by
- permit category,
- regulation,
- industrial sector,
- environmental media,

- geographic region

  as a result of enforcement actions.
- Other information as available including that analyzing the above.

RESULTING ACHIEVEMENT OF ENVIRONMENTAL QUALITY GOALS

- Statistics on emissions or discharge reductions by:
- company,
- environmental media,
- permit category,
- regulation,
- substance or contaminant,
- industrial sector,
- geographic region

  as a result of enforcement actions.
- Statistics on state of the environment by:
- company,
- environmental media,
- permit category,
- regulation,
- substance or contaminant,
- industrial sector,
- geographic region

  as a result of enforcement actions.
- Other information as available including that analyzing the above.

[52] Ontario Public Service Employees Union, *Submissions Concerning Part II of the Walkerton Inquiry: Recommendations About Provincial Government Operations and Resources (Public Hearings 2 and 3)* (Toronto: OPSEU, 2001) at 5, 36.

[53] Wieder, *supra* note 37 at 63.