Chapter 13 The Provincial Government Role in Overseeing Drinking Water Systems

Contents

13.1	Overview			395
13.2	Gover	397		
		nment Policy Current Practice		
	13.2.2	Recommendations and Comments		399
		13.2.2.1		
			Drinking Water Policy	399
		13.2.2.2		
			Ministry of the Environment	400
		13.2.2.3	· · · · · · · · · · · · · · · · · · ·	
13.3	Requi	403		
	13.3.1	Current I	Practice	403
	13.3.2	Recommo	endations and Comments	405
		13.3.2.1	Safe Drinking Water Act	405
		13.3.2.2	Amendments to the <i>Environmental</i>	
			Protection Act	410
		13.3.2.3	Agriculture	411
		13.3.2.4		
13.4	Gover	412		
	13.4.1	Current I	Practice	412
	13.4.2	Recommo	endations and Comments	414
		13.4.2.1	Drinking Water Branch	414
			Watershed Management Branch	
13.5	Opera	418		
	13.5.1	s	419	
		13.5.1.1	Current Practice	419
		13.5.1.2	Recommendations and Comments	422
	13.5.2	Inspections		423
		_	Current Regime	
		13522	Recommendations and Comments	428

	13.5.3	Voluntary	versus Mandatory Abatement	438	
		13.5.3.1	Current Regime	439	
			Recommendations and Comments		
	13.5.4	Investigation and Enforcement		445	
		13.5.4.1	Current Regime	445	
		13.5.4.2	Recommendations and Comments	448	
	13.5.5	Regulation	n of Accredited Bodies	454	
13.6	The R	ole of Oth	ner Ministries	455	
	13.6.1	The Minis	stry of Health and Long-Term Care	456	
			Recommendations and Comments		
	13.6.2	The Onta	rio Ministry of Agriculture,		
		Food and	Rural Affairs	463	
	13.6.3		nistries		
13.7	Resource Management			464	
			Resources		
			Recomendations and Comments		
	13.7.2		esource Management		
			Recommendations and Comments		
	13.7.3	Data Man	agement	467	
			Recommendations and Comments		
13.8	Transparency and Public Access to Information 4				
	-	-	ndations and Comments		

Chapter 13 The Provincial Government Role in Overseeing Drinking Water Systems

13.1 Overview

In this chapter I deal with the government's role in overseeing a safe drinking water system. The topic of government oversight was introduced in Chapter 2 with a summary of constitutional responsibilities, a review of the province's current approach to oversight, and a review of and comments on the recommendations regarding oversight made in the Gibbons Report. The chapters following that introduction focused on the mechanics of the delivery of safe drinking water but included liberal reference to the oversight function. In this chapter I develop recommendations in respect of the oversight function as well as bring together oversight recommendations made in earlier chapters and in the Part 1 report of this Inquiry.

The intent of the recommendations in this area is to strengthen provincial oversight of water delivery systems. In the Part 1 report, I found several failures in the way the provincial government exercised its oversight role in relation to Walkerton and I made a number of specific recommendations to address those failures. Taken together, the recommendations in the two reports will, in my view, improve the quality of provincial policy and provide effective oversight across the province.

As to policy, I recommend that the government develop a comprehensive, source to tap, government-wide drinking water policy and that it enact a *Safe Drinking Water Act* embodying the important elements of that policy. I also propose that the Ministry of the Environment (MOE) be the lead ministry for the development and implementation of the policy.

I recommend that two new branches be created within the Ministry of the Environment. The first, the Watershed Management Branch, would be responsible for the oversight of the watershed-based planning process described in Chapter 4. It is important that the responsibilities of the provincial

¹ Executive Resource Group, 2001, *Managing the Environment: A Review of Best Practices* (Toronto) [hereafter Gibbons Report].

In reviewing the province's current approach to oversight, I relied heavily on the following: N. d'Ombrain, 2002, "Machinery of government for safe drinking water in Ontario," Walkerton Inquiry Commissioned Paper 4; J. Merritt and C. Gore, 2002, "Drinking water services: A functional review of the Ontario Ministry of Environment," Walkerton Inquiry Commissioned Paper 5.

government for watershed management be coordinated in one place where there is sufficient expertise to manage the process. This new branch would be responsible for developing the framework for watershed planning, participating in the locally based process for the development of plans, and approving draft plans. In the event that draft plans are not developed as required at the local level, this branch of the MOE would step in and take charge of the process. A dedicated centralized branch in the MOE should promote consistency in planning across the province and provide the necessary expertise and support to ensure that good plans are developed.

I also propose the establishment of a specialized Drinking Water Branch within the MOE responsible for the oversight of drinking water treatment and distribution systems. The skills and knowledge needed to regulate and oversee drinking water providers and systems differ significantly from those required to perform most of the other responsibilities of the ministry. Within this branch I recommend creating a new position, the Chief Inspector – Drinking Water Systems, responsible for the inspections program. I suggest that individual inspectors should have the same or higher qualifications as the operators of the systems they inspect. The Drinking Water Branch would assume oversight and responsibility for the proposed quality management accreditation program discussed above. The Drinking Water Branch would also be responsible for granting most approvals necessary for operating a drinking water system. I recommend a new form of approval – an owner's licence – that will collect in one set of documents all approvals and conditions which are necessary to operate a waterworks.

To date, the MOE has conducted investigations and prosecutions of those suspected of non-compliance with regulatory requirements through its Investigations and Enforcement Branch (IEB). I am satisfied that the IEB of the MOE should remain as presently constituted, a separate branch within the ministry. For the most part, it has worked well and, in my view, the necessary independence from inspections and abatement can be maintained without the need to establish a new agency outside the ministry. However, I do recommend that the new provincial policy on drinking water provide for strict enforcement of drinking water regulations and that it be equally applied to all municipal water systems in Ontario, whether they are run by OCWA, a municipality, or a private operator.

Finally, I urge the government to proceed with the proposed Integrated Divisional System and that it include in one database, or provide central access

to, information related to source protection, each drinking water system in Ontario, and all data reasonably required by the drinking water branch and the local boards of health.

I discussed in some detail in the Part 1 report the budget reductions in the MOE. A number of the recommendations I make in this report will involve expenditures to ensure that the MOE is able to fully and effectively carry out its oversight role. It will be essential for the Province to provide sufficient resources, financial and otherwise, to implement these recommendations.

The chapter deals with the following topics: government policy, required legislative changes, required institutional and structural changes, the government's operations function, the role of ministries other than the Ministry of the Environment (MOE), the need for resource management, and transparency.

On the issue of government oversight of treatment facilities, my focus in this chapter is on water treatment and I do not devote much discussion to sewage and wastewater treatment. Although sewage treatment is an important element of source protection and is discussed in that context in Chapter 4, I do not interpret my mandate as including the management and oversight of sewage and wastewater treatment facilities. Nevertheless, there are obvious similarities in both management and oversight between water treatment and sewage treatment facilities, and much of what is set out below in regard to government oversight of water treatment has application to sewage treatment as well.

13.2 Government Policy

13.2.1 Current Practice

One of the most common submissions I heard from the parties who participated in Part 2 of this Inquiry was that the provincial government needed to develop a comprehensive policy covering all aspects of drinking water oversight from source protection through to the return of treated wastewater to the environment.

A number of parties expressed the view that prior to the tragedy in Walkerton, the government did not have a coherent and comprehensive drinking water policy that linked all elements of the drinking water system. It was argued that,

while the absence of a coherent policy was a general problem, the most significant deficiency is the absence of a clear link between source protection and safe drinking water. Although the government recognizes that these two areas are interrelated, government policies dealing with each have not been integrated. I agree with the need for a comprehensive drinking water policy.

Even the government's policy relating to source protection is fragmented in that source protection from contamination due to agriculture is, to a significant extent, carved out of the rest of the province's environmental protection regime and treated differently. Illustrations of this separation include exemptions from environmental prohibitions on the basis that an activity is a "normal farm practice," as well as the fact that the environmental regulation of farms is overseen by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and not the MOE.

Fragmentation is also evident in relation to drinking water treatment and distribution. For example, as the inquiry into the events in Walkerton showed, there was confusion as to what the respective roles of the MOE and the local Medical Officer of Health should be in responding to adverse test results, or to deficiencies found during an MOE inspection.²

Although the provincial government has toughened regulations and enforcement and committed more resources to drinking water safety since the Walkerton tragedy, there is still little evidence of the emergence of a coherent and comprehensive safe dinking water policy or strategy. A similar observation was made in the Gibbons Report, where it was recommended that the MOE develop a high-level, government-wide vision with respect to its regulation of the environment in general.³ In my view, the point is also applicable to the narrower issue of drinking water safety.

² See Ontario, Ministry of the Attorney General, 2002, *Report of the Walkerton Inquiry, Part 1: The Events of May 2000 and Related Issues* (Toronto: Queen's Printer). See also section 13.6.1 of this chapter.

³ Gibbons Report, Executive Summary, pp. 3–4.

13.2.2 Recommendations and Comments

13.2.2.1 Comprehensive "Source to Tap" Drinking Water Policy

Recommendation 65: The provincial government should develop a comprehensive "source to tap" drinking water policy covering all elements of the provision of drinking water, from source protection to standards development, treatment, distribution, and emergency response.

It is appropriate that my first recommendation with respect to government oversight relate to the development of a comprehensive policy because in my view, the necessary first step in achieving safe drinking water is to develop a government strategy or policy for doing so.⁴ Such a strategy must identify all elements of the drinking water delivery process, develop and set out an approach to each element, and assign responsibility for each element. The main elements of the drinking water process are the barriers that have been discussed in this report: source protection, treatment, monitoring, distribution, and emergency response. All of these elements should be supported by the clear assignment of responsibility, competent operators and management, and effective regulation and provincial oversight.

This report can be viewed as a recommended framework for such a comprehensive policy. However, in this regard it should be seen as the beginning rather than the end of the policy-making process. Many details remain to be worked out. I discuss the policy-making process further under Recommendation 66.

Once developed, the government's strategy should, to the extent possible, be codified into a policy manual. Codification of the policy serves a number of useful functions. First, it helps to ensure consistency. A policy set out in clear language helps avoid the inconsistency in application that often arises from vague concepts. Second, it serves an educational and motivational function. The policy should be set out in a way that will motivate employees and should become required reading for all management personnel involved in the system.

⁴ In defining policy, d'Ombrain states at p. 127: "Governments require a capacity to identify the character and scope of their responsibilities and the means of carrying them into effect. This is the policy function and must be present within government and capable of providing the coordination necessary to fulfill government-wide responsibilities and to develop appropriate legislation."

Codification of the policy also enhances the transparency of the government oversight function in that it informs interested members of the public what the government's overall approach and strategy is intended to be. This is not to say that every last detail of the government's oversight function needs to be set out on paper. It is possible to become overly prescriptive, which would not be helpful. What I envision is a document that sets out the government's goals and approach to safe drinking water with reference to the five barriers as well as to the principles of clear responsibility, competent operators and management, effective regulation, and provincial oversight.

13.2.2.2 The Leadership Role of the Ministry of Environment

Recommendation 66: The Ministry of the Environment should be the lead ministry responsible for developing and implementing the "source to tap" Drinking Water Policy.

Many ministries and agencies in the provincial government play a role in matters that are related to drinking water. In addition to the MOE, other entities include the Ministry of Health and Long-Term Care (Ministry of Health); local medical health offices; the Ministry of Agriculture, Food and Rural Affairs (OMAFRA); the Ministry of Natural Resources (MNR); and the Ministry of Municipal Affairs and Housing (MMAH). Although it is appropriate for a variety of ministries and agencies to play a role, it is in my view important that prime responsibility reside in a single lead ministry. A lead ministry will greatly assist in the development of a uniform comprehensive drinking water policy. The lead ministry's primary role should be to coordinate government efforts in enforcing and implementing the drinking water policy and to serve as the focus of accountability for the performance of the policy.⁵

Two plausible candidates exist for the leadership role in relation to drinking water: the MOE and the Ministry of Health. Upon initial consideration, the Ministry of Health emerges as a good choice. The safety of drinking water is associated in the public's mind with the maintenance of public health in the province. In some jurisdictions, the lead role in drinking water safety has been given to a health ministry or department. Even in Ontario, safe drinking water

⁵ For a further discussion of the importance of leadership as well as the Ontario government's current approach, see d'Ombrain, pp. 126–131, 137–143.

⁶ See ibid., p. 140, and the brief discussion of the approaches taken in New York and California. Drinking water initiatives in the Canadian federal government are also led by the health department.

grew out of the health function; not until the 1970s and the creation of the MOE did responsibility begin to shift.⁷

The other possible choice for the leadership role is the MOE, the current leader by default. I recommend that the leadership role be expressly assigned to the MOE. My recommendation is based partly on the fact that the Ministry of Health would not be an ideal choice. First, the Ministry of Health has since the 1970s had only a relatively minor (albeit important) role to play in the drinking water process. It would be a dramatic change to shift responsibility for the whole process. One of the principles to which I have attempted to adhere in making my recommendations in this Inquiry is to make major institutional changes only if necessary and only if clear benefits outweigh the inevitable substantial costs. The MOE has historically had a substantial involvement in drinking water. Although it has had problems in performing this role, I believe they can be resolved.

A second reason for not choosing the Ministry of Health is that it already has a number of important and sometimes controversial matters within its responsibility. Especially in view of the difficulties with our drinking water system, it is critical that lead responsibility go to a ministry that can devote substantial attention to it. Given the current public focus on health care in general, I believe that the MOE is more likely to be able to devote substantial attention to this issue. Finally, I think it is beneficial that the MOE also has a historical connection with source protection. This underscores the importance of source protection to ensuring safe drinking water.

In supporting a leadership role for the MOE, I am not recommending a continuation of the status quo. In my view, although the MOE may have been the leader by default up to the present, it has not performed the role particularly well. For it to be effective, the government must clearly and unequivocally identify the MOE as the lead ministry and must give it the mandate to develop policy beyond its present regulatory and operational reach. As I have noted in Chapter 4, this includes a mandate to influence issues that have traditionally been within the purview of OMAFRA, MMAH, and MNR. The MOE also requires adequate resources to carry out this mandate.

⁷ Ibid., p. 140. See also J. Benidickson, 2002, "Water supply and sewage infrastructure in Ontario, 1880–1990s: Legal and institutional aspects of public health and environmental history," Walkerton Inquiry Commissioned Paper 1.

13.2.2.3 The Role of Other Ministries

By recommending a leadership role for the MOE, I do not suggest that it alone should handle all aspects of the government's drinking water policy. In regard to the development, review, and implementation of the policy, it is critical that the MOE consult with other ministries and stakeholders. As noted earlier in this section, issues relating to drinking water affect and will continue to affect a number of ministries. Even in areas where I have recommended a change in responsibilities, consultation with the original ministry may nonetheless be advisable. A good example of this is OMAFRA. Although I have recommended that most elements of the environmental regulation of agriculture be moved from OMAFRA to the MOE, OMAFRA should continue to be consulted and have significant input into the development of a drinking water policy.⁸

Consultation with other governments will also be important. For example, in certain areas, including source protection, consultation with the federal government – which exercises considerable jurisdiction over environmental matters – is clearly necessary. Consultation with the federal government will also be necessary in regard to standard setting.

Of particular importance to issues relating to drinking water is consultation with municipalities. Virtually all aspects of a drinking water policy will have some impact upon municipalities. During the Part 2 expert meetings and public hearings, the Association of Municipalities of Ontario (AMO), the Ontario Water Works Association (OWWA)/Ontario Municipal Water Association (OMWA), and Conservation Ontario all agreed that there needs to be more consultation between the provincial government, municipalities, and conservation authorities. AMO, in particular, argued that as a result of a combination of cost-cutting and downloading, municipalities were left with responsibilities that they had no clear idea how to fulfill. It is essential that the relationship between the province and municipalities, as it relates to safe drinking water, be cooperative and non-confrontational. Municipal involvement in the

⁸ Although I do not consider it to be part of my mandate to dictate to government who within a ministry should be consulted, I support OPSEU's recommendation that consultation should include front-line staff. From my experience in this Inquiry, I can state that I found the perspective of front-line staff, as represented by OPSEU and the Canadian Union of Public Employees (CUPE), to be helpful in advancing my understanding of the issues. Ontario Public Service Employees Union, 2001, "Submissions concerning recommendations about provincial government operations and resources (Public Hearings 2 and 3)," Walkerton Inquiry Submission, pp. 20–22.

development of the province's policy will help to promote a healthy working relationship.

Finally, consultation should also take place with other parties that have an interest in any element of the policy. They include land users (including farmers), water systems operators, and the public, in its important role of drinking water consumer.

13.3 Required Legislative Changes

Certain legislative changes will be necessary to effect my recommendations. In making changes to legislation, I have also attempted to simplify the legislative and regulatory regime.

13.3.1 Current Practice

A number of existing Acts and regulations affect the safety of drinking water. I have set out the existing legislative framework in Chapter 2 of this report and have discussed the most significant pieces of legislation in those chapters to which they are relevant.⁹

A number of parties submitted that the volume of legislation in relation to drinking water safety can lead to confusion. For example, the Canadian Environmental Law Association (CELA) suggested that the legislation and regulatory provisions that relate to drinking water "are scattered across a number of different statutes and regulations that are administered by different Ministries, agencies or institutions whose mandates, resources, and degrees of expertise in drinking water matters vary greatly." To rectify this situation, CELA recommended that all regulations relating to drinking water safety (or at least as many as is reasonably possible) be put into a single *Safe Drinking Water Act*. It went further in recommending that a single commission, under a drinking water commissioner, be responsible for administering the new Act.

⁹ These include the *Environmental Protection Act*, the *Ontario Water Resources Act*, the *Farming and Food Production Protection Act*, the *Planning Act*, and the *Municipal Act*.

¹⁰ Canadian Environmental Law Association, 2001, "Tragedy on tap: Why Ontario needs a Safe Drinking Water Act," vol. 2, Walkerton Inquiry Submission, p. 95.

I agree with many of CELA's very helpful comments, although I am not in complete agreement with all the recommendations made. There are advantages to including all legislation relating to drinking water in a single Act. Questions could be answered by looking at a single source, and the potential for conflict among statutes and lack of clarity would be reduced. A single Act would help to underscore the notion of a uniform "source to tap" drinking water policy. It would also raise the profile of, and help to maintain the priority of, drinking water safety.

On the other hand, drinking water covers a broad range of factors. Some of these factors, while important to drinking water safety, also have much wider ramifications. A good example is my recommendation of watershed-based source protection planning. As I discuss in Chapter 4 of this report, it makes sense to do such planning in the context of province-wide watershed management planning. If implemented, such plans will be a very important element of the first barrier in a safe drinking water system – source protection. However, they also potentially have a much broader impact on environmental regulation in general. Although I have not dealt with the details of watershed management plans beyond the needs of drinking water protection, I recognize that such plans could form the basis for virtually all environmental regulation of water. For this reason they are probably most effectively dealt with in general environmental legislation such as the *Environmental Protection Act* (EPA).

While I do not believe that it is practical to have a single Act covering all matters related to drinking water, I do recommend some consolidation and simplification. Legislation related to drinking water, as well as virtually all of the recommendations in my report, should be put into four pieces of legislation, together with relevant regulations thereunder: a new *Safe Drinking Water Act*, containing provisions dealing with the treatment and distribution of drinking water; amendments to the EPA and regulations thereunder, containing provisions necessary to bring my source protection recommendations into effect; an act or regulation dealing with drinking water protection on farms; and an Act governing asset management in relation to municipal water systems.

13.3.2 Recommendations and Comments

13.3.2.1 Safe Drinking Water Act

Recommendation 67: The provincial government should enact a *Safe Drinking Water Act* to deal with matters related to the treatment and distribution of drinking water.

The purpose of the *Safe Drinking Water Act* (SDWA) is to gather in one place all legislation and regulation relating to the treatment and distribution of drinking water. As such, it should include those matters in the *Ontario Water Resources Act* (OWRA) and in my recommendations relating to treatment and distribution. Most of my recommendations for inclusion in the SDWA are dealt with in detail elsewhere in this report and, in those cases, I set out below only a general description of the subject matter to be included. In a few cases, a subject is introduced for the first time and, as a result, is discussed in greater detail.

Recognition that the Public Is Entitled to Expect that the Drinking Water Coming Out of Their Taps Is Safe

Certain parties have urged that I create a new statutory cause of action for safe drinking water. The cause of action would enable a member of the public to take the government to court for breaches of a right to safe drinking water. I have considered this issue very carefully and decided against the creation of a right. Instead, I recommend that the SDWA include recognition that people in the province are entitled to expect their water to be safe¹¹ and that there be a legislative and regulatory scheme put in place to ensure its safety. In my view, this is the ultimate goal of the drinking water system, and it is important to recognize this goal in one of the central pieces of legislation on the subject.

I have carefully chosen the words "entitled to expect" to convey the notion that it is reasonable for all those in Ontario to expect that the government will do all it reasonably can to support a safe drinking water system, *but without* creating a new substantive right. Safe drinking water is clearly a necessity of life, and it is trite to say that a healthy population could not exist without it. It is, however,

¹¹ As set out in Chapter 3 of this report, "safe" in this context means that the level of risk associated with drinking water is so minimal that a reasonable and informed person would feel safe drinking the water. See also the discussion under "Standards" in Chapter 5 of this report.

not the only such necessity. Other examples include clean air, sufficient food, and shelter. Although it can be said that the public is entitled to expect the government to take reasonable steps to ensure fair access to each of these basics, they have not, generally, been the subject of substantive rights.

To date, governments have accepted the entitlement of citizens to expect the provision of basics. Citizens may express their views on a government's success or failure to meet such expectations at the ballot box. Although governments are not always perfect in advancing such matters, I do not detect a need for the declaration of a right. This is not a situation akin to human rights or civil liberties, in which there are concerns about the tyranny of the majority. Almost all members of the public have the same interest in safe drinking water.

I am satisfied that the existing causes of action, such as negligence, nuisance, and breach of statutory duty, provide sufficient access to the courts to compensate those who suffer damages from consuming unsafe drinking water. In my view, the primary tools for ensuring the safety of drinking water lie in protecting water sources, managing water systems competently, and regulating those systems effectively. I do not think that creating new routes of access to the courts is the most effective way to advance these goals. Indeed, I would be concerned that a significant increase in legal actions would divert money and time away from those activities that are better able to address the safety of drinking water.

Identification of a Lead Ministry for the Purposes of the Safe Drinking Water Act

I think that it is important that the SDWA identify a lead ministry. For the reasons set out above in my discussion on government policy, the MOE should be designated as the lead ministry for the purpose of the SDWA and for the development and implementation of the province's drinking water policy.

Owner's Licences

As discussed in Chapter 11 and section 13.5.1.2, the provincial government should require water system owners to obtain licences. In order to obtain a licence, an owner will have to have a Certificate of Approval for the facility, a

Permit to Take Water, an approved operational plan, an approved financial plan, and an accredited operator. The concept of a licence and its elements should be set out in the SDWA.

Standard of Care

The SDWA should include the standard of care to be applied to those who exercise the municipal oversight functions, which is discussed in Chapter 10.

Approvals

The SDWA should set out the requirement for Certificates of Approval, Permits to Take Water, and operational plans in accordance with the recommendations and comments I have made in both this report and the Part 1 report of this Inquiry.¹²

Operating Agencies

In regard to operating agencies of municipal water systems, the SDWA should:

- set out a requirement that by a date to be fixed, all operating agencies of municipal treatment and distribution systems be accredited;
- require the promulgation of regulations that designate a body to design
 and oversee an accreditation system, set out certain minimum standards
 for the accreditation system (regarding classes of operator, biannual audits,
 and so on), and provide for government oversight of the process; and
- require that contracts with external operating agencies be made public.

Certification and Training of Operators

The SDWA should set out, or authorize regulations setting out, the

¹² See the Part 1 report of this Inquiry, section 9.2. See also Part 2 of this report, Chapter 11 and section 13.5.1.

recommendations I make in Chapter 12 relating to the certification and training of operators.

Standard Setting

In respect of standard setting, the SDWA should:

- provide for the creation of an advisory council on standards; and
- require regulations setting out standards for drinking water quality.

I have recommended in relation to drinking water quality standards (Chapter 5) and elsewhere that there be a requirement or authority for making regulations. In making this recommendation, I am mindful of the submissions of some parties that as much of the regulatory detail as possible be set out in the SDWA itself.¹³ The rationale for this submission is that legislation is more difficult for a government to change, and therefore less likely to be interfered with, should the government's financial position deteriorate. Although certain elements of the government's strategy (e.g., drinking water quality standards) should have the force of law and consequently should be more than guidelines or objectives, ¹⁴ it is not always practical to set them out in legislation. In the case of drinking water quality standards, for example, the ever-expanding scope of knowledge and understanding regarding pathogens and other contaminants makes it likely that the standards will have to be amended regularly. This is much more easily accomplished in a regulation.

The contents of a standards regulation, including a critique of Ontario Regulation 459/00, are discussed in some detail in Chapters 6 and 7.

Treatment, Distribution, and Monitoring

The SDWA should require regulations setting treatment, distribution, and monitoring requirements for both municipal and private drinking water systems as discussed in Chapters 6, 7, 8, and 14 of this report. The SDWA (or the

¹³ See, for example, Canadian Environmental Law Association.

¹⁴ For example, prior to August 2000, the Ontario Drinking Water Objectives (ODWO) did not have the force of law.

relevant regulations passed pursuant to it) should clearly define the systems to which it applies. The SDWA should also set out the criteria and procedure for obtaining a variance in respect of treatment or monitoring standards as discussed in Chapter 14.¹⁵

Laboratories

The SDWA (or the relevant regulation passed pursuant to it) should set out requirements dealing with government oversight of environmental laboratories as I discuss in Chapter 9.

Inspections

In regard to inspections, the SDWA should:

- create the Office of Chief Inspector Drinking Water Systems;
- set out a requirement that if in the course of an inspection or an accreditation audit a deficiency is found, a follow-up inspection must take place within one year;
- require regulations dealing with the frequency of inspections and the actions required and response time in the event of a deficiency; and
- authorize regulations for various abatement tools. 16

My comments on the inspection function are discussed in detail later in this chapter.

Enforcement

In regard to investigations and enforcement, the SDWA should:

¹⁵ See Recommendation 82.

¹⁶ See the discussion in section 13.5.3.

- maintain the investigation and enforcement function in a separate Investigation and Enforcement Branch (IEB) of the MOE; and
- authorize regulations regarding procedures and protocols for investigations and enforcement.¹⁷

I also deal with enforcement in greater detail below.

13.3.2.2 Amendments to the Environmental Protection Act

Recommendation 68: The provincial government should amend the *Environmental Protection Act* to implement the recommendations regarding source protection.

As noted above, it makes sense to separate the source protection function from the treatment and distribution function for the purpose of legislation. For this reason, I would take the source protection provisions currently in the *Ontario Water Resources Act* (OWRA) and put them in the *Environmental Protection Act* (EPA). I do not see how the OWRA provisions add much to what is already in the EPA. Consequently, it may not be necessary to duplicate all provisions.

The EPA should also be amended to bring the watershed-based source protection planning process I recommend in Chapter 4 into being. This will include provisions that:

- empower the conservation authorities to oversee the creation of draft watershed-based source protection plans;
- make watershed-based source protection plans mandatory and require the Watershed Management Branch (discussed later in this chapter) to develop the plans where a conservation authority is unwilling or unable to do so;
- require MOE approval of all watershed-based source protection plans;
- set out the legal effect of watershed-based source protection plans; and

¹⁷ See the discussion in section 13.5.4.

 authorize regulations regarding process, including parties that have a right to be involved in the process.

These provisions are dealt with in detail in Chapter 4. I also note my comments in Chapter 4 that a legislative review be undertaken to ensure the effective implementation of the watershed-based source protection plan concept. The goal of this review should be to eliminate inconsistency and ensure that the tools needed to implement the scheme are available.

13.3.2.3 Agriculture

In Chapter 4, I make a number of recommendations concerning source protection and agricultural operations including minimum standards for farming operations and individual farm water protection plans. The legislative provisions necessary to effect these recommendations could be included in the EPA. As discussed in Chapter 4, they could also be included in the proposed *Nutrient Management Act*, so long as the scope of that proposed legislation is broadened sufficiently to cover the recommendations. Any such legislation should be included within the authority of the MOE.

13.3.2.4 Asset Management

As discussed in Chapters 2 and 10 of this report, the provincial government has introduced a *Sustainable Water and Sewage Systems Act* to deal with asset management and cost recovery. I strongly support the implementation of asset management and full-cost recovery plans in relation to drinking water treatment and distribution systems. ¹⁸ I had originally envisioned that the oversight responsibility for such activities would reside in the MOE (with legislation and regulations contained in or under the SDWA). Upon reflection, it may well be appropriate for financial plans to be approved by the Ministry of Municipal Affairs and Housing (MMAH), which has historically had a close relationship with municipalities and greater experience with municipal financial affairs. Given my recommendation that water system owners obtain a licence for their water systems from the MOE¹⁹ and that an asset management plan and a full-cost recovery plan (now to be approved by MMAH) is a requirement

¹⁸ Although I do not deal with sewage treatment extensively in this report, such plans would be of obvious merit in that area as well.

¹⁹ See Chapter 10 and Recommendation 71.

of such a licence, I am satisfied that the MOE retains sufficient involvement in the process.²⁰ Since the provincial government currently envisions the asset management process is to be managed by MMAH, it makes sense that a separate Act be created.

13.4 Government Structure

In this section I recommend changes to government structure that will, in my view, help to improve the government's oversight function.

13.4.1 Current Practice

As discussed in Chapter 2, the government oversight function is currently carried out primarily within the MOE. I will not repeat the details of the structure here except to note that it was the product of a reorganization in 1998. The philosophy of that reorganization was to organize around three broad functions: "Plan, Do/Deliver, and Measure." The planning and policy function takes place within the Integrated Environmental Planning Division, which is divided into three branches: land use, air, and water. The "Do/Deliver" function takes place within the Operations Division. For the purpose of safe drinking water, relevant branches within this division include the Investigations and Enforcement Branch, the Environmental Assessment and Approvals Branch, and the Spills Action Centre. As noted in Chapter 2, the Operations Division is divided into five geographic regions, which are in turn responsible for the district offices and area offices within the region. The regions are involved in a broad range of activities, including dealing with complaints, public education, abatement, and inspections. A third function relevant to drinking water that is performed by the MOE - measurement - includes setting standards, testing, research, and monitoring financial performance. This function includes the Environmental Sciences and Standards Division, which includes the Laboratory Services Branch, the Environmental Monitoring and Reporting Branch, the Standards Development Branch, and the Environmental Partnerships Branch.

From the perspective of creating an ideal safe drinking water system, the difficulty with the current structure is that it does not focus directly on drinking

²⁰ Note as well my recommendation that the MOE, because of its technical expertise in water systems, be required to approve any provincial funding.

water issues.²¹ The MOE has a broad mandate and is responsible for many issues other than safe drinking water. The current structure is not designed to avoid losing drinking water issues "in the crowd." While the move away from a media-based approach that was intended by the 1998 reorganization may have achieved certain efficiencies, it has also had a cost, in the form of less focused attention on particular areas, such as drinking water. This lack of focus allowed government functions relating to drinking water to slip down – and eventually off – the priority list. It allowed a situation to develop in which inspections occurred less frequently than they should have, and in which follow-up was not done. A safe drinking water system is of sufficient importance to merit more focus.

Importantly, the expertise required to oversee and regulate the safety of drinking water is often quite different from that involved in carrying out other MOE functions. For example, the knowledge and experience required to oversee water treatment, monitoring, distribution, and the competent management of a water system are different from the knowledge and expertise needed to prevent the contamination of the natural environment. As it is now, MOE officers who are responsible for inspections, abatement, and enforcement are asked to perform both functions.

A number of parties submitted to me that it would be helpful to create a drinking water commission that would have a semi-autonomous existence outside of the MOE and would be responsible for the government oversight of the treatment and distribution functions.²² It was argued that the advantages of an independent commission include: the ability to focus solely on drinking water issues, free from the distractions of the other demands of the MOE, a greater likelihood that there will be a uniform comprehensive approach to drinking water safety, and the separation (to some extent), of drinking water issues from the political influences of the day.²³

I agree that increased focus and greater uniformity are desirable goals. I also recognize that benefits arise from separation from the political sphere. In addition, as I set out in the Part 1 report, the MOE has in the past not done a particularly good job of overseeing the drinking water system in Ontario.

²¹ As noted in the Part I report of this Inquiry, there was evidence that in May–June 1995, senior managers in the Operations Division were polled and responded that communal water was not a core program of the MOE. It was clear that there was not much focus on drinking water.

²² I note that none of the parties advocated an equivalent entity for source protection.

²³ Canadian Environmental Law Association, pp. 109–111.

However, I have decided not to recommend a separate commission. Although drinking water is critically important to the quality of life in Ontario, it is no more important than such things as clean air, land, and food. Strong arguments can be made for the special status of other "needs." If a water commission were to be seen as the beginning of a trend for ways of dealing with important needs of the population, the structure of government could be changed dramatically.

In addition, the other effect of increased independence from political influence which has been advocated by some parties, is a decrease in political accountability. If responsibility is passed on to a commission, the government will find it easier to deflect blame when something goes wrong. So long as processes are in place to promote transparency, political accountability can be a powerful democratic tool.

As I develop below, I am satisfied that the focus and expertise that would result from a dedicated entity such as a commission can be achieved by the creation of a new separate Drinking Water Branch in the MOE.

13.4.2 Recommendations and Comments

13.4.2.1 Drinking Water Branch

Recommendation 69: The provincial government should create a Drinking Water Branch within the Ministry of the Environment to be responsible for overseeing the drinking water treatment and distribution system.

The Drinking Water Branch should perform almost all of the drinking water treatment and distribution functions currently performed by the MOE. The only exception is the enforcement function, which should remain in a separate Investigations and Enforcement Branch.²⁴ The functions of the Drinking Water Branch would include:

- assisting in developing drinking water policy;
- developing and maintaining sufficient technical expertise, including access to outside expertise, to enable the branch to effectively oversee the regulation of drinking water treatment and distribution;

²⁴ This is discussed in detail in section 13.5.4 below.

- participating in drinking water standards development and implementation;
- granting approvals for water takings and for municipal water systems;
- issuing owner's licences for municipal water systems;
- monitoring the accreditation program for operating agencies;
- performing inspection and abatement duties;
- carrying out emergency response; and
- providing public education.

I recognize that a separate branch focused solely on drinking water goes against the recent trend toward a multi-media approach at the MOE. I further recognize that a multi-media approach results in certain efficiencies that will not be available to the branches I recommend. On the other hand, the creation of a Drinking Water Branch results in a number of advantages that outweigh any disadvantage.²⁵

The first advantage is that the creation of this branch increases the profile of drinking water within the government. The existence of a branch, the sole focus of which is drinking water, will help ensure that drinking water safety does not fade into the background when other competing issues begin to demand the attention of the senior public servants or the minister.

Second, this branch can be very useful in maintaining accountability. A branch that is assigned the responsibility of drinking water safety will help to eliminate confusion about who is responsible for what. However, since the branch remains under the direct authority of the minister, direct political accountability remains intact as well. This is to be contrasted with a commission or other arm's-length entity that enables the government of the day to be shielded to some extent from responsibility.

²⁵ I note as well that the concept of a Drinking Water Branch and a Watershed Management Branch received widespread support from the parties in Part 2. I invited all participants to comment on the concept and received no negative comments.

Finally, a branch is conducive to the formation and maintenance of an expertise in drinking water safety. I have noted that the government's level of expertise in matters of drinking water safety must be increased. For example, I recommend in Recommendation 73 that water treatment plant inspectors should have qualifications that are the same as or better than those of water treatment plant operators. This leads to the development of a team of inspectors dedicated to treatment plants.

The need for the development of a body of expertise goes well beyond inspections. Even in areas where the relevant function, such as accreditation, will be carried out by entities outside of the provincial government it is in my view essential that the MOE have sufficient expertise to be able to effectively monitor and evaluate the system. The need for expertise within the MOE will be particularly great during the transition period between the present and the final implementation of the new quality management system that I have recommended. During this period, municipalities will be faced with very important decisions, such as whether to combine their systems with those of other municipalities and whether to contract out the operation of their systems or to seek accreditation themselves. In my view, it is very important that they be given assistance and guidance in respect of these decisions.²⁶

In summary, in my view the provision of safe drinking water is a function of sufficient importance to warrant a separate branch. The specific contents of the functions listed in the recommendations are dealt with elsewhere in this report.

13.4.2.2 Watershed Management Branch

Recommendation 70: The provincial government should create a Watershed Management Branch within the Ministry of the Environment to be responsible for oversight of watershed-based source protection plans and, if implemented, watershed management plans.

In Chapter 4, I recommend the implementation of watershed-based source protection plans and also endorse the concept of watershed planning generally.

²⁶ The development of a body of expertise within the Drinking Water Branch does not mean that the branch should do it all alone. As noted elsewhere in this report, I encourage the MOE to make use of expertise that exists elsewhere, including at universities and within organizations such as the OWWA, the OMWA, and the AWWA.

I did not make a recommendation for the implementation of watershed management plans because I recognize that they have broad implications that take me beyond my mandate. However, they do appear to me to constitute a sensible way for the province to proceed. Whether the Province proceeds only with watershed-based source protection plans or with watershed management plans as well, in my view the MOE should carry out the function through a separate branch.

Although source protection plans are directly related to drinking water, they involve implications that go much further. Indeed, they seem to me to have the potential of being a cornerstone of environmental management in general. Over time, it will be critical for the MOE to build a body of expertise dedicated to the planning process. These factors lend themselves to the creation of a separate branch.

The responsibilities of the Watershed Management Branch should include:

- providing assistance in developing the Province's Drinking Water Policy as well as broader environmental policy;
- overseeing the creation and implementation of watershed-based source protection plans and watershed management plans;
- approving draft watershed-based source protection plans;
- developing and maintaining sufficient technical expertise, including access to outside expertise, to enable the branch to oversee the creation and implementation of watershed-based source protection plans;
- providing technical support for conservation authorities;
- running the watershed-based source protection plan process in areas where there is no conservation authority or where the conservation authority is unwilling or unable to do so; and
- overseeing farm drinking water protection plans.

I stress that for the government's overall drinking water strategy to be effective, it is necessary that there be a close relationship between the Watershed Management Branch and the Drinking Water Branch. As noted in the policy

section above, one of the important functions of the Minister of the Environment will be to foster a culture within the MOE that is based on a source to tap drinking water policy.

13.5 Operations

Operations has been referred to as the "Do/Deliver" function within the MOE. Although it includes a fairly broad range of responsibilities, those most relevant to safe drinking water are approvals, inspections, abatement, and investigations and enforcement. I have recommended that these functions, with the exception of investigations and enforcement, be the responsibility of the Drinking Water Branch.

All four functions, as they related to the tragedy in Walkerton, were important themes in Part 1 of this Inquiry. They were repeated and in some cases expanded upon during the Part 2 process. It was generally recognized by the parties and the commissioned issue paper authors who dealt with the subject that although these functions play a vital role in the overall strategy for safe drinking water, significant shortcomings exist.

A number of issues were raised repeatedly in both parts of the Inquiry. The most significant of these were the contents of Certificates of Approval, the frequency of inspections, the desirability of unannounced inspections, the need for more direction on the scope of inspections, the need for more attention to follow-up on identified deficiencies, the need to improve the training and qualifications of MOE staff, a more creative use of abatement tools, and the need for a strict enforcement policy.

As in other areas, I was able to take comfort from the fact that many of the parties identified the same shortcomings of the approvals, inspection, abatement, and enforcement functions, at least in general terms. Not surprisingly, there was not the same level of unanimity regarding possible solutions.

In sections 13.5.1 to 13.5.4 below, I begin with a brief description of the current system (both before and immediately after the Walkerton tragedy) followed in each section by my recommendations for ensuring that these important government oversight functions work effectively to help ensure the safety of drinking water in Ontario. In section 13.5.5, I deal in general terms with the issue of government oversight of accredited bodies.

13.5.1 Approvals

The focus in this section is on two existing types of approvals: Certificates of Approval for waterworks and distribution systems, and Permits to Take Water (PTTW). Included among my recommendations in this section is a new form of approval relevant to treatment and distribution systems – the owner's licence.

13.5.1.1 Current Practice

Certificates of Approval: The concept of a Certificate of Approval dates from the nineteenth century and was originally issued under provincial public health legislation. Currently, the Environmental Assessment and Approvals Branch (formerly the Approvals Branch) of the Operations Division issues Certificates of Approval for waterworks under the OWRA. The owner of the waterworks (including distribution systems) must obtain approval for the construction and operation of the works.²⁷ At the time of the Walkerton tragedy, Certificates of Approval remained valid until they were rescinded.

Certificates of Approval were initially similar to building permits and were approvals to build a municipal water system with specific machinery. The MOE began to attach operating conditions to Certificates of Approval, including conditions relating to water treatment and monitoring, in the mid-1980s. Since such conditions were released by the MOE only as non-binding guidelines (the Ontario Drinking Water Objectives (ODWO)), their inclusion in a Certificate of Approval provided the district offices with a mechanism for enforcing treatment and monitoring requirements. The practice of attaching conditions evolved slowly and sporadically, on a site-specific basis, and in time moved to the inclusion of model conditions in new or amended Certificates of Approval. By 1992, the MOE had developed a set of model operating conditions ("Model Terms and Conditions") that were attached to new Certificates of Approval for municipal water systems. Unfortunately, there was no effort to reach back in a systematic way to determine whether conditions should be attached to existing certificates.

Initially, the ODWO formed the basis for the express conditions attached to newly issued Certificates of Approval for waterworks. Adherence to the ODWO

²⁷ Ontario, Ministry of the Environment, November 1999, *Guide to Applying for Approval of Municipal and Private Water and Sewage Works* <www.ene.gov.on.ca/envision/gp/30700le.pdf>. Sections 52 and 53, *Ontario Water Resources Act*, R.S.O. 1990, p. 1.

was often mandated through the inclusion of a condition requiring the applicant to "comply with the requirements of the Ontario Drinking Water Objectives, as amended from time to time." Over time, however, Approvals Branch staff developed generic conditions that were included in the guide used by engineers who were reviewing applications for approval. In September 1992, the branch issued its *Review Procedures Manual for Approval of Municipal and Private Water and Sewage Works*, which contained model conditions for waterworks Certificates of Approval. In June 1996, the MOE published a document titled *Approval Process and Drinking Water Sampling and Monitoring*, which further refined the model conditions to be attached to waterworks Certificates of Approval.²⁸

Partly as a result of their evolutionary development, the current state of Certificates of Approval is extremely confusing. For example, some certificates have conditions, some do not. They are a strange hybrid of building permit and operating licence, and a single treatment and distribution system can have tens and even hundreds of Certificates of Approval attached to it. In addition, as noted in the Part 1 report of this Inquiry, it is difficult for MOE staff, let alone the public, to access much of the information related to Certificates of Approval.

Since the Walkerton tragedy, the MOE has taken some steps to improve the approvals process:

- All Certificates of Approval for municipal water treatment plants must now be renewed every three years.
- Municipalities are now required to submit a professional engineer's report to the MOE in relation to each waterworks every three years.²⁹
- The MOE is intending to consolidate all past approvals into a single document with appropriate conditions of approval for each of the 700

²⁸ These model conditions included requirements for maintaining a total chlorine residual of 0.5 mg/L after 15 minutes of contact time and for the water system owner to notify the district manager and the local Medical Officer of Health when results failed to meet the ODWO standards or when unchlorinated water was introduced into the distribution system. MOE staff testified that the former condition could be appropriate when (as was the case with Well 5 in Walkerton) the water source had a known history of bacterial contamination or in cases where there was relatively direct communication between the aquifer and the surface. The latter condition would likely have been included in all new Certificates of Approval for facilities with chlorinated groundwater.

²⁹ O. Reg. 459/00, s. 13.

municipal water supplies. The new certificate will also indicate the physical upgrades that are necessary to ensure compliance with Ontario Regulation 459/00.³⁰

• The MOE is implementing a data system to store such documentation related to Certificates of Approval.

Only since the Walkerton outbreak, has the absence (or inconsistency) of operating conditions in existing Certificates of Approval been comprehensively addressed by the MOE. Prior to that, however, problems with Certificates of Approval did not escape comment. Citing the lack of "enforceable criteria or certificate of approval limits with which to regulate and ensure compliance for most ... water facilities," the 1992 report of the provincial government's Sewage and Water Inspection Program (SWIP) proposed either the enactment of a legally binding regulation regarding the operation of sewage and water treatment facilities, or the issuance of a new Certificate of Approval to every facility.

Further, in a report finalized in March 2000 but not issued until October 2000, the Provincial Auditor found that the MOE did not have an adequate system for reviewing the conditions of existing Certificates of Approval in order to ensure that they met current environmental standards. As I noted in the Part 1 report, the MOE also failed to put in place a program to examine the water sources supplying existing wells to determine whether a condition requiring continuous monitoring should be added to their Certificates of Approval.

Permits to Take Water: Permits to Take Water (PTTW) are of more recent origin than Certificates of Approval. They were introduced in 1961, when the OWRA was amended to authorize the regulation of water taking after disputes arose over the taking of water to irrigate tobacco crops. Any facility capable of drawing 50,000 or more litres of water per day requires a permit under the OWRA.³¹ Permits are issued by the MOE's regional offices.³² Decisions to grant PTTW are subject to the notification and public consultation provisions

³⁰ Ontario, Ministry of the Environment, 2002, "Operation clean water," Fact Sheet http://www.ene.gov.on.ca/envision/news/2002/011801fs.htm [accessed January 2002].

³¹ OWRA, s. 34 (3).

³² According to the OWRA, s. 34(6), a director may in his or her discretion issue, refuse to issue, or cancel a permit, may impose such terms and conditions in issuing a permit as he or she considers proper, and may alter the terms and conditions of a permit after it is issued.

of the *Environmental Bill of Rights*. PTTW are concerned with water *quantity* rather than water quality.

13.5.1.2 Recommendations and Comments

13.5.1.2.1 Owner's Licence

Recommendation 71: The Ministry of the Environment should require the owners of municipal water systems to obtain an owner's licence for the operation of their waterworks. In order to obtain a licence, an owner should have:

- a Certificate of Approval for the facility;
- a Permit to Take Water;
- approved operational plans;
- an approved financial plan; and
- · an accredited operating agency.

I strongly favour a requirement that owners obtain a licence for each municipal water treatment system that they own. In order not to overcomplicate the matter, I recommend that initially licences be restricted to treatment plants and distribution systems. The licence requirement should eventually be extended to wastewater treatment systems. For reasons of practicality, it will also likely be important that a separate licence be obtained for each municipal water system. Some municipalities will therefore require several licences.³³

The licence will enable the province to both consolidate and simplify the current array of approvals and will function as a means of setting out in one place all the obligations of the owner in respect of the plant to which it relates. The owner's licence should be renewed every three to five years, at which time the MOE should be obliged to review each component as well.³⁴

³³ In case of a multi-plant municipality, the licences will obviously have to be coordinated.

³⁴ In Part 1, I recommended that Certificates of Approval be subject to renewal every five years. The current recommendation is made to accommodate my expansion of the traditional certificate of approval into a licence.

Most of the components of the licence are discussed in detail in Chapter 10 of this report. However, the Certificate of Approval that I envision is somewhat different from the one currently in existence and requires some elaboration. The primary focus of the new Certificate of Approval³⁵ I have in mind will be on the physical and technical capabilities of the municipal water system. Its purpose is to certify that the system is technically capable of achieving what it is intended to achieve. There should only be one certificate per water system. I recognize that the certificate may have to encompass a relatively large number of separate pieces of equipment, but I do not see that as an obstacle to consolidation. Where under the old system an operator would have to obtain a new Certificate of Approval when a new pump was obtained, the certificate I envision would require the amendment of the system certificate to take the new pump into account. Consideration should also be given to the question of whether every change to the system should require an amendment to the Certificate of Approval. For example, it seems to be reasonable that the replacement of an existing pump with a new pre-approved model would not require an amendment. This could be achieved if the original certificate provided for a range of options.

The water system certificate would likely not contain operating conditions or performance criteria. Any such conditions and requirements that are not set out in the legislation or regulations should be incorporated in the operational plan, which is also required as part of the licence.

In relation to physical and technical capabilities, it is important that the MOE approve systems and any significant modifications to systems in order to ensure that each system is capable of meeting minimum requirements and that it does not wildly exceed what would reasonably be required. The latter concern is particularly important in view of my recommendation of full-cost recovery.

13.5.2 Inspections

Inspections are another critical element in the government's oversight function. The most significant inspection issues raised in the Inquiry were the frequency of inspections, the desirability of unannounced inspections, the need for more direction on the scope of inspections, the need for more attention to follow up

³⁵ Given the historical baggage associated with the term "Certificate of Approval," it may be appropriate to change the name of this instrument.

on identified deficiencies, and the need to improve the training and qualifications of inspectors.

13.5.2.1 Current Regime

As noted in the Part 1 report, inspections of water treatment plants have occurred since the time of the Ontario Water Resources Commission (OWRC).³⁶ They were initiated to ensure that plants were operated in a manner that provided potable water. In 1972, the functions of the OWRC were assumed by the newly created MOE. The MOE decentralized in 1974, and the district offices became responsible for water treatment plant inspections. Thereafter, the function alternated between the regional and district offices. The policy-making function, including decisions about the scope and frequency of inspections, has remained a centralized ministry function.

Although there was no prescribed frequency for inspections between 1974 and 1988, inspections of water treatment plants were conducted on a regular basis prior to 1980.³⁷ The number of formal inspections diminished substantially in the 1980s; some plants received only one inspection during the entire decade.³⁸

The low frequency of inspections of any kind and the total absence of scheduled inspections during the 1980s were noted by the Provincial Auditor in his 1988 report. Finding a number of deficiencies with the function, he noted that during the 1980s the approach to inspections was primarily reactive and he recommended a shift in focus to make them primarily preventive and proactive. To facilitate this shift, the Provincial Auditor recommended scheduled annual inspections of all water treatment plants.

In response to the Provincial Auditor's 1988 report, the MOE established the Sewage and Water Inspection Program (SWIP), under which, after an initial inspection, water facilities were to be inspected every two years. Initially SWIP was administered by the regional offices and between 1990 and 1994, a two-

³⁶ The OWRC took the lead in the regulation and operation of water and sewage facilities from 1956 to 1972.

Much of the information about inspections found in this section is taken from the Part 1 testimony of R. Shaw (Exhibit 287A, Table 1, p. 2).

³⁷ Many plants were annually inspected.

³⁸ In Walkerton, after the 1980 inspection, the MOE did not conduct a formal structured inspection again until 1991. There were, however, periodic drop-ins by abatement officers.

year inspection schedule for water and sewage treatment plants was maintained. In 1994, the responsibility for determining the frequency of inspections under SWIP was transferred back to the district offices. After this transfer, the frequency of inspections varied, but SWIP placed emphasis on the need to inspect more often those facilities that had historical problems or significant deficiencies. From 1994 to 2000, the Operations Division work plan set out that inspections of water treatment plants were to be completed once every four years. However, if a significant deficiency was found, that plant was to be inspected again in the following year. In 1998, in response to budget cuts, water treatment plant inspections were put into the "optional" category to distinguish them from other inspections, those in the "mandatory" category, which were given priority.

The nature of water treatment plant inspections has also changed over time. At the time of the OWRC, much of the expertise relating to the operation of a water treatment plant lay with the OWRC and an important function of inspections was to facilitate the transfer of knowledge to the operators. At that time, inspections were informal and consultative in nature. Although reports were prepared, they had no standardized format. The reports were sent to the relevant municipality, the operating authority and, if adverse bacteriological results were found, to the Medical Officer of Health. The same general approach was followed after the establishment of the MOE in 1972 and the assignment of the inspections function to the district offices in 1974.

The nature of inspections changed significantly after the creation of the SWIP program in 1990. In response to the concerns expressed in the Provincial Auditor's 1988 report regarding the lack of scheduled inspections and the absence of the reports on whether the health and aesthetic requirements of the ODWO were being met, inspections became regularly scheduled and focused on compliance and conformance issues. Although they still had an educational component, this was no longer the focus of inspections. During this period, inspection reports were standardized. Copies of the reports were sent to the municipal operating authority and the local Medical Officer of Health. Action plans were requested from operators to deal with any deficiencies, and voluntary (rather than mandatory) compliance was the preferred MOE response to deficiencies. Internal reports were prepared summarizing the inspection findings for 1990–1992 and 1992–1994. The 1992–1994 report identified inadequate sampling at 51% of the plants inspected and a failure to meet PTTW requirements at 18% of the plants that had permits.

As noted above, in the 1994–2000 period, responsibility for SWIP shifted back to the district offices. During this period, the focus in inspections continued to be on compliance/conformance with Certificates of Approval, PTTW, licensing, the ODWO, and Procedure B13-3 (Chlorination). The 1994 Provincial Auditor's report made two significant recommendations dealing with inspections: that priority be given to following up at plants that had significant compliance issues, and that enforcement actions should be strengthened to include mandatory orders.

An internal MOE evaluation of the district inspection function (including water treatment plant inspections) undertaken in 1999 included the following observation: problems disclosed in an inspection were not rigorously followed up; the tracking of deficiencies was not readily accessible to decision makers; and follow-up inspections were not undertaken.

As noted in the Part 1 report, the experience in Walkerton demonstrated significant difficulties with the inspection process in the late 1990s. In Chapter 9 of that report, I provide details about the lack of instructions to inspectors for reviewing MOE files, the lack of clarity in instructions with respect to the review of operator records, the inadequacy of follow-up procedures, and the need for unannounced inspections. I will not repeat those comments here, except to note that they provide useful background for the recommendations I make below.

A number of changes were made to the inspections program after the *E. coli* outbreak in Walkerton. All water treatment plants were inspected between June and December 2000 and again in 2001. Currently, the goal of the MOE is to inspect all plants annually. Table 13.1 shows the number and percentage of plants inspected in each year since 1990.

Responsibility for inspections remains with the district office. Since May 2000, the focus of inspections continues to be on compliance. This now requires compliance with Ontario Regulation 459/00, which includes several new requirements and gives the force of regulation to matters that were previously guidelines.³⁹

³⁹ Prior to August 2000, the ODWO (guidelines) were often incorporated as requirements in Certificates of Approval, thereby making them mandatory.

Table 13.1 The Communal (Municipal) Water Inspection Program, 1990–2001

Period (Total No. of Plants)	No. Inspected	% Inspected
1990–1992 (607)	607	100
1992–1994 (607)	532	86
1994–1995 (630)	378	60
1995–1996 (630)	188	30
1996–1997 (630)	224	35
1997–1998 (630)	186	30
1998–1999 (630)	152	24
1999–2000 (630)	185	29
2000–2001 (659)	659	100

Among the new requirements, owners of water treatment plants and distribution systems are required to prepare quarterly reports. These reports must:

- describe the water system, the operation of the system, and the sources of the water collected, produced, treated, stored, supplied, or distributed by the system;
- describe the measures taken to comply with Ontario Regulation 459/00 and the Ontario Drinking Water Standards (ODWS) during the quarter;
- summarize the analytical results for water sampling obtained during the quarter for water sampling and the notices of adverse water quality sent to the Medical Officer of Health and the MOE in accordance with regulation 459/00.⁴⁰

In addition, owners are also required to prepare engineer's reports every three years. ⁴¹ An engineer's report is to include:

⁴⁰ O. Reg. 459/00, s. 12(1)(a)–(c). Section 12(d) provides that the owner must also provide information referred to in s. 12(1)(a)–(c) relating to previous quarters if the information only became known during the quarter for which the report is prepared.

⁴¹ O. Reg. 459/00, s. 13(1), (2). Reports under this section must be prepared by a professional engineer (as defined in the *Professional Engineers Act*, one who has experience in sanitary engineering related to drinking water supplies and who is not an employee of the owner) in accordance with the MOE publication "Terms of reference for engineers' reports for water works," originally dated

- a description of the waterworks;
- a compilation of Certificates of Approval for the works that is available within the municipality;
- an assessment of the potential for microbiological contamination;
- a characterization of the raw water supply source;
- an assessment of operational procedures and recommendations;
- an assessment of existing physical works and recommendations;
- recommendations for a monitoring regime for the entire waterworks system to ensure compliance with the ODWS and Ontario Regulation 459/00.⁴²

Quarterly reports and engineer's reports are intended to assist the inspection process.

The Environmental SWAT Team is another recent addition to the MOE's Operations Division. Environmental officers and investigation officers conduct inspection sweeps of sectors that have high non-compliance rates and/or present a high risk to public health. None of the sectors currently being inspected by the Environmental SWAT Team is directly related to drinking water.

13.5.2.2 Recommendations and Comments

13.5.2.2.1 Who Should Perform the Inspection Function?

Most parties in Parts 1 and 2 of the Inquiry advocated keeping the inspection function within the MOE. There is, however, a suggestion in the Gibbons

August 2000. The specifics of submitting the reports depend on whether the system is listed in the MOE publication "Drinking water submission dates for first engineer's report," dated August 2000. Under O. Reg. 459/00, s. 13(1), the requirement applies if: (a) the system is owned or operated by a municipality or by OCWA; (b) a municipality or OCWA has contracted with the owner of the system to obtain water from the system; or (c) reports under this section are required by an approval or by an order or direction under the Act.

⁴² Ontario, Ministry of the Environment, 2000, "Engineers' reports for waterworks – technical brief, Ontario," August, p. 1.

Report that inspections are a type of function that may be appropriate for alternative service delivery. Inspections are an operational rather than a policy function. The Gibbons Report recommends that "at some point in the future" the government should consider creating an arm's-length operating agency to fulfill the MOE's "operational/program delivery" functions. ⁴³ While the report stops short of advocating such a move at this time, the clear impression is that the authors consider the assignment of such function to an arm's-length independent body to be a "best practice." In my view, any such move would have several disadvantages and should in no circumstances be undertaken unless and until it can be established to have no negative impact on safety.

I recognize that my findings in the Part 1 report show that the MOE has not done a good job in recent years in conducting inspections. That, however, does not in my view lead necessarily to the conclusion that the government should transfer these functions to others. First, I do not accept that the MOE, with proper funding, training, and direction, cannot carry out this function as effectively as any third party. Accepting, as I do, that the oversight of drinking water is of such public importance that the government should perform the oversight role itself, I think we would have arrived at a very sorry state of affairs if we were to conclude that the government, even with proper direction and resources, is unable to fulfill its function.

The reason commonly given for outsourcing government functions is cost savings, and there is no doubt that outsourcing the inspections function may provide cost savings to the government. Cost is always important, but some government functions are of such a nature that the potential for cost savings alone should not lead to a decision to transfer all or part of the government regulatory function to a third party. In my view, the oversight of the safety of Ontario's drinking water is such a function.

There are two primary reasons why I favour retaining the inspections of drinking water systems in the MOE. The first is political accountability. I have already, in the context of the suggestion that there be a separate drinking water commission, expressed the view that it is essential for direct and immediate political accountability to exist regarding the safety of our drinking water. The Walkerton *E. coli* outbreak presents an excellent example of the importance of this accountability. This Inquiry has not only exposed the failure of the government's oversight and regulatory role, but has made clear the responsibility

⁴³ Gibbons Report, p. 24.

that must be borne for those failures by the government. Even before the delivery of the Part 1 report, the government responded quickly and strongly to address what it saw as the weaknesses in the way its oversight role had been exercised. That response was no doubt dictated both by the concerns about what happened in Walkerton and by the public outcry and concern about the safety of drinking water across the province. I question whether, if the inspections and oversight role at the time of the Walkerton outbreak had been exercised through an independent third party, the government would have been under the same need to be accountable for what took place or would have taken the immediate action that it did. Immediate and direct political accountability for the regulatory and oversight role is an important safeguard for the people of Ontario to ensure the safety of their drinking water.

I also have concerns about the potential for real and perceived conflict of interest if the inspection function is transferred to a body made up of industry representatives. It is essential that Ontario's drinking water be safe and that the reasonable public be confident about the safety of its drinking water. A self-regulating organization composed in whole or in part of industry representatives responsible for the operations management of water systems may raise the perception of a lack of independence. I note that in the United Kingdom, where the water systems are privately owned and operated, the government has rejected the concept of an industry self-regulating organization to carry out the inspections and regulatory role. Instead, the government has created an inspectorate that is accountable to the minister responsible for the delivery of safe drinking water. This inspectorate has been provided with a strong mandate and strong powers to ensure that those operating and managing water systems comply with government regulations.

I also agree with a point made by Professor Nicholas d'Ombrain in his paper commissioned by the Inquiry. He raises the question of "the viability of what would be left of the Ministry of the Environment if the regulatory and enforcement functions were removed."⁴⁴ He is referring here to the risk that the ministry would eventually lose all operational expertise if it were not involved in either the operational or the oversight function. This loss would critically

⁴⁴ d'Ombrain, p. 145.

hamper the MOE in its policy development role as well as its overall responsibility for the safety of the system.

In summary, while I do not foreclose the possibility of transferring the inspection function to an arm's-length entity at some point in the future, in light of the many potential disadvantages, I suggest that the government proceed cautiously. Further, because the primary concern in regard to drinking water delivery is safety, delegation to a non-government third party should not occur unless it is clearly established that the proposed system is just as – and preferably more – safe.

13.5.2.2.2 Chief Inspector – Drinking Water Systems

Recommendation 72: The provincial government should create an office of Chief Inspector – Drinking Water Systems.

The inspection program for water treatment plants would benefit enormously from the creation of the office of Chief Inspector – Drinking Water Systems. Someone of sufficient expertise and stature to obtain the respect of the operators' community should be appointed to the position.

My impression of the current inspection program is that it lacks clear direction and consistency of practice. As discussed below, there is no accepted protocol for carrying out all inspections. Practices, as well as the frequency of inspection, differ from district to district. Although it is acceptable for the actual inspection function to be carried out from the district or regional offices, there is a need for a centralized position responsible for implementing the program across the province.

The position of Chief Inspector should be located within the Drinking Water Branch. The Chief Inspector should have input into the content of the MOE's inspection policy and should be responsible for ensuring that the policy is implemented. On a more practical level, the Chief Inspector should be responsible for: developing and then updating the inspection protocol (discussed below); developing, updating, and (possibly) implementing the inspection training program; monitoring the overall frequency and adequacy of inspections; and reporting to the public about the overall performance of Ontario's water supply systems and the inspection program.

One benefit of giving the Chief Inspector a public reporting function is that it would increase the public awareness of the inspection function. This, in turn,

would increase the effectiveness of the inspection program. I envisage a Chief Inspector who operates in a manner analogous to that of the Chief Medical Officer of Health.

13.5.2.2.3 Inspector Qualifications

Recommendation 73: Inspectors should be required to have the same or higher qualifications as the operators of the systems they inspect and should receive special training in inspections.

It is clearly important that inspectors receive training. Below, I discuss the scope of inspections and the development of an inspections protocol. Inspectors should be trained to understand and implement this protocol. In addition, it is in my view equally important that inspectors have a good understanding of what they are inspecting. This is necessary in order for them to perform satisfactorily. For example, in weighing the significance of a deficiency and then deciding what follow-up action to take, an inspector must appreciate the practical consequences of the deficiency. Such appreciation is more likely to come about if the inspector has obtained the same technical qualifications as an operator has. Qualification as an operator should ensure that an inspector is able to fully understand the practices of the operator who is being inspected and the significance of those practices to the provision of safe drinking water. In addition, qualification as an operator will also assist the inspector in obtaining the respect and cooperation of operators, another desirable outcome. In order to achieve the appropriate level of expertise, it may be desirable for inspectors to be dedicated to inspections within their area of expertise.

13.5.2.2.4 Scope and Content of Inspections

In the Part 1 report of this Inquiry, I made the following recommendations in response to certain deficiencies I observed in the inspections performed in Walkerton:

The Ministry of the Environment should develop and make available to all Ministry of the Environment inspectors a written direction or protocol, for both announced and unannounced inspections:

 Outlining the specific matters to be reviewed by an inspector in preparing for the inspection of a water system; Providing a checklist of matters that an inspector is required to review, as well as matters that it may be desirable to review, during an inspection of a water system, and providing guidance concerning those matters to be discussed with the operator of a waterworks facility during an inspection.

In particular, I was very concerned that none of the inspections conducted in Walkerton in the 1990s addressed the vulnerability of Well 5 to surface water contamination despite the fact that information about this vulnerability was contained in the MOE's files. ⁴⁵ Similarly, it was unfortunate that in 1998, the inspector did not go beyond the current month's operating sheets. Had she done so, she would likely have noticed that the usual practice in Walkerton was to record only chlorine residuals of either 0.5 or 0.75 mg/L, a fact that would likely have raised suspicions. Some of the inspectors who gave evidence in Part 1 would have looked at earlier data, but there was no consistent practice. Such problems are not restricted to Walkerton. For example, while a protocol was included in the *Report on Municipal Sewage and Water Treatment Plant Inspections*, ⁴⁶ the evidence in Part 1 was that it was not circulated widely and that even experienced inspectors had never seen the document.

The development, distribution, and enforcement of a protocol will help to ensure the uniformity and adequacy of inspections. I do not propose to draft such a protocol for this report, but I note that much can be learned from the lessons of Walkerton and from my comments about the shortcomings of the process discussed there.

In my view, among the things that an inspector should be required to review, before beginning an inspection, are data relating to the quality of source waters and circumstances relating to changes in land users or surrounding water. Further, inspections should identify any problems and should recommend the steps required to correct such problems. A copy of this report should be provided to the local conservation authorities.

⁴⁵ This highly relevant fact had been known since the well was constructed in 1978. Critical information in this regard was contained in the MOE's files and storage areas. However, the inspections were not directed to examine those materials; nor, indeed, were all these materials accessible to them. See Recommendations in section 13.7.3.1 below regarding access to and organization of information.

⁴⁶ Ontario, Ministry of the Environment, 1989, *Report on Municipal Sewage and Water Treatment Plant Inspections*. The report resulted in the establishment of SWIP.

I raise one point of caution in regard to the protocol. In designing it, the Drinking Water Branch should be careful not to create a mere checklist. I do not advocate turning inspections into an exercise of putting tick-marks on a form. The protocol I envision is a more detailed, thoughtful review of what an inspection should cover.

13.5.2.2.5 Frequency of Inspection

In Part 1, I made the following recommendations about the frequency of inspections:

- The Ministry of the Environment's inspections program for municipal water systems should consist of a combination of announced and unannounced inspections. The inspector may conduct unannounced inspections when he or she deems it appropriate, and at least once every three years, taking into account such factors as work priority and planning, time constraints, and the record of the operating authority.
- As a matter of policy, inspections of municipal water systems, whether announced or unannounced, should be conducted at least annually. The government's current program for annual inspections should be continued.
- There should be a legal requirement that systems with significant deficiencies be inspected at least once per year. Ontario Regulation 459/00, also known as the Drinking Water Protection Regulation, should be amended to require that an inspection be conducted within one year of any inspection that discloses a deficiency as defined in the regulation. In this regard, deficiencies include any failure to comply with the treatment, monitoring, or testing requirements, or with specified performance criteria, set out in the regulation or in the accompanying drinking water standards.

As noted at the beginning of this section, the frequency of inspections has varied substantially over the past 20 years. During certain periods, at various plants, years passed without an inspection. More troubling is the fact that follow-up inspections were not conducted at plants with known, serious deficiencies – including the Walkerton plant. Fortunately, this practice has changed since the tragedy in Walkerton. In my view, the current practice of

annual inspections is appropriate in the circumstances. I am concerned, however, that the current attitudes toward inspections will change as the memory of the Walkerton outbreak fades. When budget-cutting pressures return in the future, for example, there may be pressures to reduce inspection frequency. Although frequent inspections have an impact on safety generally, they are particularly important with respect to problem systems. For these reasons, it is advisable to set out a statutory requirement that a follow-up inspection be carried out within 12 months if an inspection discloses that an operator has failed to comply with treatment, monitoring, or testing requirements.

The need for annual MOE inspections when follow-up is not required by statute may be affected by the implementation of accreditation and biannual audits for operating agencies of municipal water systems. Accreditation audits and the inspections will overlap to some extent, and, in some circumstances, it may be appropriate for the MOE to reduce the frequency of inspections. Specifically, once accreditation is implemented, it should be reasonable for the MOE to aim for inspections every two to three years of those systems that are trouble-free and have a history of sound management. The audit reports should be provided to the MOE and if deficiencies are noted in either an audit or an MOE inspection, the 12-month statutory follow-up requirement should be triggered.

In my view, not all inspections should be regularly scheduled inspections. There is much merit in unannounced inspections. As I noted in my Part 1 report, unannounced inspections enable an assessment to be done under normal working conditions rather than in a situation possibly structured to accommodate the inspection. They can also eliminate the effect that preparation may have upon an accurate view of the operation. ⁴⁷ As a result, I recommend that the MOE should immediately alter its practice and should have a mix of scheduled and unannounced inspections.

13.5.2.2.6 Timeliness of Follow-Up

In Part 1, I recommended:

• The Ministry of the Environment should establish and require adherence to time lines for the preparation and delivery of inspection

⁴⁷ See my discussion in the Part 1 report, pp. 321–322, of the likelihood that Stan Koebel altered chlorine residuals in preparation for Michelle Zillinger's February 1998 inspection.

reports and operator responses and the delivery of interim status reports regarding remedial action.

It is perhaps obvious to note that inspections are of limited or no utility in the absence of a follow-up mechanism to help ensure that deficiencies are addressed and eliminated. The experience in Walkerton shows that in a number of respects, the MOE's follow-up to inspections was faulty. I have set out detailed findings in section 9.3.5 of my Part 1 report. For present purposes it is sufficient to note that in the 1990s the inspections of the Walkerton plant revealed compliance deficiencies. In each case, the general manager of the Walkerton Public Utilities Commission stated that he would comply, but he never did.

As was the case with inadequate inspection procedures, the information before me suggests that this problem was not restricted to Walkerton. An internal evaluation of the district inspection function, including water treatment plant inspections, conducted in 1999 found as a general problem that follow-up on deficiencies noted during inspections was not being rigorously pursued and that the subsequent inspections required in the work plan were not being undertaken.

The MOE must take steps to correct this situation. The mandatory 12-month follow-up inspection that would occur when deficiencies are found is an important element of a better approach. Follow-up can also be improved in other ways. First, the MOE must ensure that its own reports are completed and delivered within a reasonable period of time. If deficiencies are found, the operator should be required to respond with an action plan that will address those deficiencies, also in a reasonable time. The action plan should be approved by the MOE. Once the plan is approved, the operator should be required to deliver interim status reports on any remedial action. This follow-up procedure should have the same effect as an order, so that any breach is subject to enforcement proceedings.

When the accreditation system for operating agencies that I have recommended in Chapter 11 takes effect, deficiencies found in the biannual audits will have to be integrated as well. In addition to whatever "accreditation" actions result from such deficiencies, they should also be reported to the MOE, whereupon the same procedure should apply, as if they had been discovered in an MOE inspection.

13.5.2.2.7 Additional Comments

An additional matter relating to inspections, although not appropriate for a recommendation, does merit comment. This is the principle by which inspection decisions should be guided. My recommendation regarding the scope of inspections involves the development of an inspection protocol. I have suggested a number of elements of such a protocol, both in this report and in the Part 1 report, but I leave the protocol's development and evolution to the MOE. Even when a protocol has been developed, it is not realistic to expect that it will provide instructions on all aspects of the inspection process. Of necessity, some matters will be left to the discretion of the inspector or other MOE personnel. In these circumstances it is useful to develop a set of principles to guide the development of protocols and the exercise of individual discretion. ⁴⁸ These decisions should be guided by the following principles: effectiveness, a precautionary approach, consistent application, independence from outside influence, transparency, and adequate resources.

The first principle, effectiveness, is best understood as the overall goal of the inspections program. An effective program will identify deficiencies in an operation and react so as to minimize the reoccurrence of deficiencies in the future. Effectiveness requires the regular review and analysis of the outcomes (the performance of the systems) and the adjustment of existing practices when improvement is required.

The second principle, a precautionary approach, flows from my view that decisions should be made with a view to the significant health risks that can result from improperly treated drinking water. Since decisions affecting the inspection of water treatment plants have a potentially serious effect on human health, decision-makers should err on the side of caution. Operators should not be given the benefit of the doubt. If there is any doubt, the safer approach should be adopted.

Decisions regarding inspections should also be made without regard to the identity of the operator. Private operating agencies, municipalities, and the OCWA should be treated alike. During Part 1 of the Inquiry it was suggested that the MOE was reluctant to prosecute municipalities – that they were viewed as being "children of the province." The data on enforcement practices lends

⁴⁸ I have made a similar recommendation in regard to enforcement.

⁴⁹ This allegation was repeated in Part 2 of the Inquiry by Energy Probe.

some support to this allegation. I do not need to deal with this allegation beyond stating the obvious: inspections should be approached in the same way, no matter who the operator is. The chief inspector should have a specific mandate to ensure that all operators are treated equally insofar as inspections and enforcement are concerned.

The principle of independence from outside interests flows from the equal application principle. Inspections should be used as a means of determining how well operators are performing their functions in an effort, ultimately, to protect public health and safety. They should not be used for any other purpose. Here I am referring primarily to the potential use of inspections to aid the enforcement function. I will deal with this in more detail in the enforcement section of this chapter. For present purposes, it is sufficient to note that for reasons of procedural fairness, it is important that the inspection function remain separate from the Investigations and Enforcement Branch.

The fifth principle, transparency, requires that all those with an interest in the process – including the operator, the municipality, and the public – have access to the inspection process and results. When deficiencies are noted, these parties should be made aware of the plans for follow-up inspections as well as the results of each of these inspections.

Finally, it is important that the inspection program have adequate resources. Adequacy of resources for all government initiatives and responsibilities is the subject of another section in this chapter. As a general proposition, where health is concerned, budgets should not be cut at random, leaving those responsible to "make do" with what they have. The government should decide what programs to offer and what the content of such programs should be. Once this decision has been made, the government should provide adequate resources. In the context of inspections, the MOE is free to decide the frequency, form, and scope of inspections. Once the program has been decided, however, it should be realistically costed, and sufficient funds should be made available to run it.

13.5.3 Voluntary versus Mandatory Abatement

For the purpose of this chapter I use the term "abatement tools" to refer to the measures used to help bring operators back into compliance. Traditionally, the debate in this area has focused on whether to use mandatory or voluntary

means to attempt to achieve compliance. In my view, the MOE must take action to use mandatory abatement more often than has been the case in the past. Legally enforceable orders should be issued whenever a deficiency is noted relating to the safety of drinking water.

Mandatory abatement should not be restricted to issuing orders that, if breached, result in enforcement proceedings. The MOE should continue with abatement mechanisms such as administrative orders.

In addition to using mandatory abatement to achieve compliance with standards, it is also appropriate for the MOE to use voluntary abatement techniques to improve performance beyond minimum requirements. Voluntary abatement is particularly useful in regard to source protection. To avoid confusion, I will refer to this latter form of abatement as "technical assistance."

13.5.3.1 Current Regime

The current practice of the MOE is to rely on a combination of voluntary and mandatory abatement measures. Voluntary abatement describes the process under which the MOE, without resorting to legal compulsion, asks or directs an operator to take certain measures. Voluntary abatement may take a variety of forms: a letter, a violation notice, a recommendation in an inspection report, a phone call, or even an oral instruction during a field visit. Depending on the nature of the problem, voluntary abatement could involve establishing a program to be undertaken by a water utility within prescribed time limits.

The MOE's Compliance Guideline of 1995 has several criteria for pursuing mandatory abatement, including an unsatisfactory compliance record, deliberate non-compliance, repeated violations, and unsatisfactory progress in a voluntary program. The guideline suggests that when these situations occur, mandatory abatement should be pursued unless it is decided that a voluntary program should be followed.⁵¹ The reasons for this decision are to be documented in an occurrence report. The guideline also provides that the MOE will issue no more than two written warnings before mandatory abatement is initiated, and

⁵⁰ Ontario, Ministry of the Environment, 1995, "Compliance guideline," June 16, s. 5.0.

⁵¹ Ibid., s. 4.4.

that unsatisfactory progress on a voluntary abatement program should not be tolerated for more than 180 calendar days.⁵²

The hallmark of mandatory abatement, whatever form it takes, is that the required measures are compelled by a legal obligation and are subject to enforcement proceedings. The MOE may issue a control document ⁵³ – either a Director's Order or a Field Order under the OWRA, requiring the operator to carry out the desired measures. Alternatively, the MOE may choose to amend an authorizing document, ⁵⁴ such as a Certificate of Approval, to direct the operator to do what is required. Therefore, mandatory abatement can convert a requirement under a government guideline or policy into a legally enforceable prescription, similar to a provision in legislation or a regulation.

There are more than 60 control documents and authorizing documents available to the MOE. The most common documents invoked are various kinds of orders. The provincial officer may issue an order (often called a Field Order⁵⁵) if there has been a contravention of a provision of the OWRA or the regulations; a provision of an order, notice, direction, requirement, or report made under the OWRA; or a term or condition of a licence, permit, or approval made under the OWRA.⁵⁶ An order is an enforcement instrument issued to "legally encourage" operators to take corrective action.

If an order is issued, it may require the person to whom it is directed to comply with any directions set out in the order within the time specified. For example, orders may relate to:

• the repair, maintenance, or operation of waterworks in such a manner and with such facilities as are specified in the order;

⁵⁶ OWRA, s. 16(1).

⁵² Ibid., s. 5.6. This period relates to any one period of unsatisfactory progress and not to the length of the program.

⁵³ Ibid., s. 1, defines control documents as "documents which are authorized by statute such as control order, stop orders, etc., which have specific requirements." They are binding upon the recipient and can be directly enforced by prosecution.

⁵⁴ Ibid, s. 1, defines authorizing documents as "documents which are authorized by statute such as certificates of approval, licences and permits which may have conditions." These documents permit and control the manner in which activities are carried out. They are binding on the recipient and are directly enforceable by prosecution.

⁵⁵ Ibid., s. 1, defines a Field Order as "a control document issued by a Director who has been appointed for the purposes of field orders."

- sampling, analysis, or reporting with respect to the quality or quantity of any waters;
- monitoring and recording in relation to the natural environment and waters and reporting on the monitoring and recording (e.g., an officer might use a Field Order to instruct an operator to conduct proper sampling or chlorination).⁵⁷

Field Orders, unlike Director's Orders, are used to address immediate problems in situations when time may be of the essence (e.g., in the case of a stop order). However, in the case of longer-term problems, such as a situation where a water treatment facility was in need of a new chlorinator, a Director's Order would be used.

The issuance of orders is usually followed by assistance with compliance. Environmental officers work with waterworks owners and operators to correct problems that are brought to the MOE's attention. If the operator does not comply with the issued order or take corrective action, it can be prosecuted for violating the statute, regulation, Certificate of Approval, permit, or order.⁵⁸

The 1994 Provincial Auditor's report found that the MOE was placing too much emphasis on voluntary abatement and recommended that enforcement actions be strengthened to include the increased issuance of orders. Partially in response to this criticism, the MOE issued the 1995 Compliance Guideline. Despite the fact that this guideline set out circumstances in which mandatory abatement was to occur, MOE staff continued to use voluntary measures in circumstances where mandatory measures would have been a better choice.

In Part 1 of the Inquiry, I heard evidence suggesting a continued reluctance on the part of MOE staff to use mandatory abatement measures.⁵⁹ As noted in the Part 1 report, this reluctance gradually began to change, beginning in 1997.⁶⁰ In March 2000, the MOE issued a directive to follow a mandatory abatement approach.

⁵⁷ OWRA, s. 16(3).

⁵⁸ OWRA, s. 107.

⁵⁹ See the Part 1 report of the Inquiry, section 9.4.2.3.

⁶⁰ Ibid., section 9.4.2.4.

Since the tragedy in Walkerton, the MOE has introduced policies strongly focusing on mandatory abatement. The statistics suggest an increased propensity to issue Field Orders (now Provincial Officers' Orders) and to follow up on such orders and other deficiencies.⁶¹ Of the 659 plants inspected in 2000, a total of 367 were identified with one or more of the following deficiencies:

- inadequate sampling programs (267);
- inadequate disinfection procedures or practices (111);
- a failure to meet minimum treatment standards (76); and
- improperly certified operators (63).⁶²

In total, 341 Field Orders were issued, all of which were followed up on by their respective expiry dates.

Although they are not part of the evidence before me, I have heard of complaints about MOE staff who issued orders, where none were required, solely in order to improve statistics. Specifically, the complaint was that an order was issued regarding a practice in respect of which the operator was already in compliance, thereby inflating statistics concerning the number of orders issued and, subsequently, concerning the numbers of operators brought into compliance. If this occurred, it is obviously not an acceptable practice.

Since May 2000, the MOE has also made important inroads in the area of administrative actions. Administrative actions are a potentially useful alternative to enforcement proceedings and go hand-in-hand with mandatory abatement. They give MOE officers the power to impose penalties or take action, including issuing stop orders on the spot. These powers were increased significantly in 2000 by the *Toughest Environmental Penalties Act*, 2000 – an Act that amends the OWRA, the EPA, and the *Pesticides Act*.

This Act provides for significant new powers for provincial enforcement officers, particularly in the area of administrative actions. Administrative monetary penalties will enable abatement officers to issue tickets of up to \$10,000 for

⁶¹ There were 1,265 such orders issued in 2000, compared with 307 in 1999. This has been attributed to being a response to the Provincial Auditor's report of 2000. Ontario, Hansard, Standing Committee on Public Accounts, April 26, 2001.

⁶² R. Shaw, testimony, Walkerton Inquiry (Part 1 Hearing, April 17, 2001).

pollution offences. Administrative penalties reduce the time and expense of enforcement by allowing for summary convictions without a lengthy investigation and trial, but they do not carry the stigma of a conviction. However, regulations under the Act are yet to be passed before it can have any effect on enforcement efforts.

13.5.3.2 Recommendations and Comments

13.5.3.2.1 Mandatory Orders and Strict Enforcement

Recommendation 74: The Ministry of the Environment should increase its commitment to the use of mandatory abatement.

Mandatory abatement should be the only option to address anything other than technical violations of operations requirements. Mandatory orders carry greater force than do voluntary measures. If they are breached, they can result in the commencement of enforcement procedures or, as discussed below, an administrative penalty. Voluntary abatement tools, on the other hand, can result in confusion. The clear message behind them is that the deficiency is not as serious as one that would merit a mandatory order. In times of pressure on available resources, it would not be surprising to see voluntary measures slide down the priority list. As such, while voluntary abatement may be sufficient for minor problems, ⁶³ it is not appropriate for any deficiency that affects the safety of drinking water.

A greater use of mandatory abatement received the support of a number of parties in the Part 2 process of the Inquiry. The Ontario Public Service Employees Union (OPSEU), for example, submitted that the increased use of mandatory compliance was necessary to restore "public trust and confidence in the supervisory role of the Ministry of Environment." The Canadian Environmental Law Association (CELA), Canadian Environmental Defence Fund (CEDF), and the Ontario Water Works Association (OWWA)/Ontario Municipal Water Association (OMWA) also made very strong submissions for the implementation of a broad range of mandatory abatement tools.

⁶³ I understand that deficiencies measured in the 2000 inspection included such minor matters as improper signage. Such matters do not require a mandatory order.

⁶⁴ Ontario Public Service Employees Union.

13.5.3.2.2 Additional Abatement Tools

I support the recent trend toward the expansion and development of new tools to assist mandatory abatement. Such tools include administrative penalties and various forms of administrative orders, including stop orders and administrative orders. These remedies need to be studied more carefully. I agree with OPSEU's observations that the MOE needs to study the effect of such tools and develop a policy for their use. Although it is conceivable that a penalty of \$10,000 per occurrence would have a positive effect on compliance for water treatment operators, effectiveness – one of the guiding principles I referred to earlier – requires that the penalties be reviewed and assessed regularly to determine whether they have an effect on compliance.

13.5.3.2.3 Government Assistance

The strict enforcement of standards and requirements is an essential component of a safe drinking water system, but there is also room for government assistance in a range of options, from financial and technical assistance to education programs.

In regard to source protection, the recommendations I have made in respect of minimum standards for farms and individual farm water protection plans, for example, should provide significant protection for the environment. Clearly, though, there is room for further improvement. As discussed in Chapter 4, the MOE and OMAFRA should develop programs and incentives that encourage farmers to do even better.

A number of forms of technical assistance would also be useful in respect of the treatment and distribution system. The concept of circuit riders was recommended by a number of parties in Part 2. Circuit riders would be trained and experienced individuals who offer assistance to operators. They would be especially useful for small operations and in the interim period leading up to mandatory accreditation. However, even after that period, they would continue to serve a useful purpose in assisting small and medium-size operations as well as ensuring that the MOE retained sufficient operational and technical expertise.

13.5.4 Investigation and Enforcement

Breaches of legally enforceable requirements – whether they are set out in legislation, regulations, ministry orders, or authorizing documents – are subject to enforcement proceedings. In the MOE, these proceedings are handled by the Investigations and Enforcement Branch (IEB).

The operation of the IEB was not directly called into question in Part 1 of the Inquiry because no mandatory orders were issued to the Walkerton Public Utilities Commission before May 2000, when the tragedy occurred. In Part 2, the primary criticism I heard with respect to inspections was that enforcement was not sufficiently strict. In support of this assertion, a number of parties relied on the see-sawing numbers of enforcement procedures and penalties obtained through the 1990s. Table 13.2 was cited by the CEDF in their written submissions to the Inquiry.

Although the numbers rebounded from a low in 1995, many parties argued that the MOE's general approach to enforcement still needs to be toughened.

13.5.4.1 Current Regime

The IEB investigates suspected violations of environmental legislation and is responsible for all aspects of environmental enforcement. ⁶⁵ Investigation officers in the branch collect the evidence and lay the charges for environmental prosecutions. The IEB is usually made aware of information about a violation through an occurrence report. If deemed necessary, an IEB (provincial) officer will start an investigation to determine whether there are reasonable and probable grounds to lay charges.

If an investigation is warranted, the supervisor will assign an IEB officer "for the purpose of conducting an investigation to determine whether reasonable and probable grounds exist for laying charges."

The Compliance Guideline outlines what IEB staff should consider in order to reach an "informed judgment" as to whether a prosecution should be initiated.

⁶⁵ The IEB was created in 1985 because of a perceived delivery conflict with the local district officers playing the role of inspector as well as enforcer.

⁶⁶ Ontario, Ministry of the Environment, 1995, s. 9.1.

Table 13.2 Annual Enforcement Summary, 1992-1998

This chart compares statistics as enforcement activities for the calendar years 1991 to 1998.

IIII) CIIQIC	this chait company statistics as empleciment activities for the calchaal years 1991 to 1990.		יווכוור מכנואונוכ	ומו מוכ מוכוומ	ar years 1551 to	.000		
Activity	1661	1992	1993	1994	1995	1996	1997	1998
Assigned Investigations	1,569	1,502	1,605	1,452	1,372	821	874	1,045
Prosecutions Initiated	309	322	289	289	170	128	142	208
Charges Laid	1,896	2,158	1,570	1,640	1,045	758	951	805
Individuals Charged					158	110	102	159
Companies Charged					125	104	130	270
Charges against Individuals					615	342	488	353
Charges against Companies					430	416	463	452
Cases with Convictions	299	266	211	237	188	121	136	137
Cases Withdrawn	30	21	11	27	35	20	8	15
Cases Dismissed	52	31	21	34	18	7	2	12
Individuals Convicted	166	426	248	362	255	182	205	105
Companies Convicted	388	352	246	284	218	148	225	183
Number of Fines	674	989	464	551	387	273	262	391
Charges with Convictions	757	768	512	652	504	365	418	414
Companies with Convictions					230	162	215	243
Individuals with Convictions					274	204	203	171
Fines against Individuals					\$1,845,279	\$750,535	\$760,100	\$622,325
Fines against Individuals					\$1,220,225	\$453,499	\$195,760	\$241,515
Jail Terms	0	0	10 d	0	7–1/2 m	490 d	5 m	
Other Penalties	\$687k	\$266k	\$48K	\$373k	\$2.7m	\$298k	\$385k	
Fines Imposed	\$2.5m	\$3.4m	\$2.1m	\$2.4m	\$3.0m	\$1.2m	\$95k	\$863k

Please Note: These figures are subject to change when or if new information is received, e.g., appeal.

The considerations include:

- the seriousness of the violation itself, including whether the violation
 poses a significant risk to, or will have an adverse effect on, human, plant,
 or animal life, property, or the environment;
- the seriousness of the violation in the context of the ministry's overall regulatory scheme, including a consideration as to whether the pollution emitted as a result of the violation is a serious obstacle to achieving the ministry's air quality and water quality objectives;
- whether the violation appears to have been deliberate;
- whether due diligence exists; and
- the offender's compliance record.⁶⁷

If the IEB officer recommends prosecution, the officer prepares a written brief and submits it to the IEB supervisor. The IEB supervisor and manager will review the brief and then forward it to the IEB director or designate; that person reviews the brief and forwards it to the Legal Services Branch. Once a prosecution brief has been prepared, the Assistant Deputy Minister's Office (Operations Division), the district office, and others (where appropriate) will be notified of the recommendation to initiate a prosecution.

The Legal Services Branch becomes involved after the investigation and the preparation and circulation of the prosecution brief. The director of the Legal Services Branch or his/her designate will consult with staff lawyers about whether the evidence obtained is adequate and about whether prosecution would be "in the interests of the administration of justice." There may also be consultation with staff of the Ministry of the Attorney General. The Legal Services Branch may choose not to proceed, but it will first make contact with and consider any additional information provided by the IEB. 70 Ultimately, the decision and authority regarding whether a prosecution will proceed rests with the Attorney General. 71

⁶⁷ Ibid., s. 10.

⁶⁸ Ibid., s. 9.3.

⁶⁹ Ibid., s. 9.4.

⁷⁰ Ibid., s. 9.5.

⁷¹ Ibid., s. 9.6.

When a formal prosecution proceeds, either there will be a guilty plea and settlement, or the matter will proceed to trial. Often, a central issue in any trial is the alleged violator's due diligence – based on some of the "informed judgment" factors referred to above. If the alleged violator took all reasonable precautions, it is unlikely that the prosecution will go forth or be successful.

The OWRA states that every person that contravenes the Act or regulations, that fails to comply with an order, notice, requirement, or report made under the Act, or that contravenes a term or condition of a licence, permit, approval, or report made under the Act is guilty of an offence.⁷² The OWRA identifies the penalties that both individuals and corporations are liable for.

Every individual convicted of an offence under the Act is liable to fines and/or imprisonment. Similarly, every corporation convicted of an offence under the Act is liable, and fines (and, in the case of officers and directors who have acted improperly, imprisonment terms), are specified.⁷³ The *Toughest Environmental Penalties Act*, 2000 recently amended the penalty structure of the OWRA, the EPA, and the *Pesticides Act* by increasing the amount for fines and lengthening terms of imprisonment.

More severe fines and terms of imprisonment apply to certain offences under the OWRA (as they did prior to the new Act), including any act that "impairs the quality" of any waters and any act that contravenes a provision of the regulations that relates to water treatment or distribution systems with specific requirements.⁷⁴

13.5.4.2 Recommendations and Comments

13.5.4.2.1 Location of the Investigation and Enforcement Function

During the Inquiry, some concern was expressed about the status of the Investigations and Enforcement Branch (IEB) within the MOE. Specifically, the Energy Probe Research Foundation (EPRF) argued strenuously that the IEB function should be moved out of the MOE to the Ministry of the Solicitor General. It argued that the co-existence of policy-making, operations, abatement, and enforcement within one ministry leads to conflicts of interests

⁷² OWRA, s. 107. "Person" is defined to include a municipality.

⁷³ OWRA, s. 108.

⁷⁴ OWRA, s. 109 (3.1).

and diminishes "the effectiveness of the enforcement function." The EPRF further argued that the transfer of the IEB function out of the MOE would reduce the risk of a successful challenge in an enforcement proceeding on the grounds of "abuse of process" and "officially induced errors." Finally, the EPRF argued that moving the function would reduce concerns over bias or favouritism that have arisen in connection with enforcement against OCWA or the municipalities. 76

Other parties have argued that significant benefits attach to having some interaction between IEB and other MOE functions such as policy-making, abatement, and inspection. This position was advanced by the MOE "front-line workers," as represented by OPSEU, which argued that although the IEB should remain in a separate branch and procedural protections should be put in place, a good working relationship must exist between abatement (including inspections) and the IEB.⁷⁷ A good analogy is found in many professional governing bodies where there are separate departments for handling complaints, inspections, and audits that do not necessarily lead to proceedings for the discipline or prosecution branch. OPSEU recognizes the potential conflict between the two types of functions and concedes that it is important for the IEB to have a quasi-independent status.⁷⁸

While I am mindful of the concerns raised by EPRF, I am in general agreement with the position advanced by OPSEU. Specifically, I agree with EPRF (and many other parties) that there needs to be a strong, strict enforcement policy that applies equally to all operators — municipal, provincial, or private. I also agree that the process must function in such a way to avoid successful challenges based on abuse of process, officially induced error, or other administrative unfairness problems. I am not persuaded, however, that it is necessary to move the IEB out of the MOE to achieve these objectives.

⁷⁵ Energy Probe Research Foundation, "Energy Probe Research Foundation's recommendations for public hearings no. 2 & 3: Provincial government: functions and resources," Walkerton Inquiry Submission (Public Hearing, July 24, 2001), p. 3.

⁷⁶ In their submissions, representatives of EPRF stressed evidence heard in Part 1 to the effect that the IEB considered municipalities to be the "children of the province," the implication being that it would be difficult to prosecute one's own children. Note that the CEDF also referred to the lack of enforcement against municipalities but not in support of an argument from the MOE to relocate the functions of the IEB.

⁷⁷ Ontario Public Service Employee's Union, 2001, "Submissions to Part 2 of the Walkerton Inquiry concerning public hearing no. 1: Guiding principles and government structure," Walkerton Inquiry Submission, pp. 37–38.

⁷⁸ As OPSEU pointed out, Jim Merritt testified on April 12, 2001 at p. 40 that the IEB was created to separate the enforcement and abatement functions and to avoid potential conflicts between them.

Throughout this chapter I have stressed that in future the MOE must take a stricter approach to deficiencies at water treatment plants. Voluntary abatement practices for serious deficiencies in water treatment operations can no longer be tolerated. This strict enforcement of regulations and orders must also apply within the IEB. I will deal with this point again under the next recommendation. However, in my view, the strict enforcement policy can be implemented in an IEB that exists within the MOE. There are many examples in Ontario of policy, abatement, and enforcement functions existing successfully within the same ministry or entity.⁷⁹ Having the various functions co-exist successfully within the same ministry requires both an acceptance of the principle that strict enforcement is necessary and an assurance of procedural fairness.

I want to deal briefly with the procedural fairness point. The concern – which can be characterized as a breach of procedural fairness or an abuse of administrative discretion under section 8 and possibly section 7 of the *Canadian Charter of Rights and Freedoms*⁸⁰ – comes down to a concern that routine inspections could be turned into covert investigations that would otherwise require the use of search warrants or other procedural protections. When inspectors are truly acting as investigators, they are required to adhere to the stricter procedural requirements of the investigation process.⁸¹

Although the determination of whether an individual is acting as an inspector or an investigator can be factually difficult, the problem can be avoided by a clear separation of functions and personnel. So long as inspectors function solely as inspectors and do not also participate in the investigation process, and so long as investigators stick to investigations and do not improperly use inspection powers to assist, it is difficult to see how *Charter* or procedural fairness problems will arise. For these reasons, it is important that the investigation and enforcement function be kept separate from other functions within the MOE. This does not mean that there cannot be communication between inspectors and investigators. So long as the lines of communication

⁷⁹ For example, the Ontario Securities Commission, the Toronto Stock Exchange, the Law Society of Upper Canada, and the College of Physicians and Surgeons of Ontario.

⁸⁰ Section 7 of the *Charter* states that "Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice." Section 8 provides that "Everyone has the right to be secure against unreasonable search or seizure."

⁸¹ See, for example, *R. v. Inco Ltd.* (2001), 54 O.R. (3d) 495 (C.A.), which turned on the issue of whether an MOE officer was acting on reasonable grounds that a violation had occurred (in which case he would have required a search warrant) or had no such reasonable grounds (in which case he could have relied on statutory inspection powers).

remain formal, so that the functions of the two groups are not seen to meld, the procedural rights of those being regulated can be protected.

13.5.4.2.2 Enforcement Principles

Recommendation 75: The Ministry of the Environment should increase its commitment to strict enforcement of all regulations and provisions related to the safety of drinking water.

In a previous section, I discussed the development and adoption of a set of guiding principles to assist with decision making relating to inspections. I believe that a similar set of principles would assist in the investigation and enforcement function.⁸² The principles are very similar, and any differences between them are in response to the different contexts of the functions:

- strict enforcement;
- effectiveness:
- consistent application to all operators;
- independence from all non-IEB influence;
- transparency of decision making; and
- adequate resources including staff with knowledge and training.⁸³

Strict enforcement is the primary principle in relation to enforcing statutes and regulations dealing with the safety of drinking water. This was one of the most oft-repeated submissions I heard in Part 2 of the Inquiry. Virtually all parties felt, and I strongly agree, that those involved in the provision of drinking water must understand that deviation from the regulations and lapses in safety will not be tolerated. This message is best reinforced by a strict enforcement policy, in which the failure to follow the requirements of the system will be prosecuted and will have serious adverse consequences for those responsible.

⁸² Because of my mandate, these principles are focused on drinking water issues.

⁸³ I asked the parties to comment upon the first four principles listed during the Part 2 public hearings. They received broad endorsement from most of the parties. Transparency and effectiveness were suggested by the parties, and I agree that they should be added to the list.

This is not to say that strict enforcement is the only tool to be used to achieve safe drinking water. As noted elsewhere in this report, other tools must also be used. With regard to source protection, for example, a combination of education, financial incentives, and regulation can be beneficial.⁸⁴ In my view, however, the strict enforcement of existing regulations is the necessary foundation on which such programs and incentives must be based.

The second principle is effectiveness. As I noted in relation to inspections, effectiveness is best understood as the overall goal of the IEB to minimize the occurrence, specifically the reoccurrence, of breaches of the regulatory framework governing safe drinking water. Effectiveness will hopefully result from the application of the other principles. As I noted above, it involves pausing at regular intervals to review the consequences of previous work – to identify what works and what does not work – and to adjust practice to achieve the desired results.⁸⁵

The principle of consistent application applies to enforcement decisions as it does to inspection decisions. For the system to be effective, it is critical that enforcement apply equally to all. In relation to water treatment plant operators, it should apply equally to municipalities who operate their own systems, to OCWA, and to private operators. Similarly, in relation to source protection, enforcement should be applied in the same way to municipalities, to agriculture, and to industry.

Independence from non-IEB influence is another principle that, it is hoped, does not require much elaboration. Enforcement should not be used as a tool to achieve objectives not related to the delivery of safe drinking water. There should not be a policy of leniency in response to an infraction because the activity it relates to has other benefits. Similarly, the function should be free from political influence. The permanent instruction to the IEB should be: "strict enforcement, consistently applied."

⁸⁴ M.J. Goss, K.S. Rollins, K. McEwan, J.R. Shaw, H. Lammers-Helps, 2002, "The management of manure with respect to water quality," Walkerton Inquiry Commissioned Paper 6, p. 28.

⁸⁵ I am in complete agreement with the comments made by OWWA/OMWA that effectiveness should not be measured solely by the number of successful prosecutions, but also by effect on compliance rates, repeat offender rates, and improvement in drinking water quality or environmental quality. Ontario Water Works Association/Ontario Municipal Water Association, "Final submission related to the provision of safe drinking water in Ontario," Walkerton Inquiry Submission (October 2001).

The final two principles, transparency and adequate resources, also apply to the inspection function. Both principles are the subject of further analysis later in this chapter.

13.5.4.2.2 Public Enforcement Rights

Recommendation 76: The Ministry of the Environment should initiate a process whereby the public can require the Investigations and Enforcement Branch to investigate alleged violations of drinking water provisions.

CELA and CEDF each made forceful and persuasive arguments for broadening and strengthening the public's enforcement rights. CELA, for example, argued for the creation of a "citizen's suit" mechanism that "allows Ontarians to enforce drinking water requirements in civil court." At its broadest, this recommendation would allow each citizen to step into the shoes of the IEB and the Ministry of the Attorney General and enforce the regulatory framework.

In my view, the enforcement of provincial regulation should primarily be the responsibility of the provincial government. Certainly, in respect of water treatment operations, if the IEB is functioning properly, it is difficult to imagine the need for citizen enforcement rights. I am also concerned that an increase in actions commenced by the public will divert time and money from the operation of the system. Consequently, in regard to water treatment plant operations, I am not inclined to recommend such a right.

On the other hand, I do favour a mechanism by which members of the public can report suspected violations resulting in a requirement that the IEB inspect these alleged violations within a reasonable time. After such an investigation, if the IEB does not initiate an action, it should provide publicly available reasons for not doing so. So long as the IEB's decisions and actions are transparent and accountable, the preferable course is to maintain enforcement as an IEB responsibility. The IEB's failure to act properly can in turn result in an appropriate public response.

Circumstances may be different in respect to other environmental offences, including those arising in the source protection context. The higher volume of potential offenders and the almost infinite number of potential infractions means that enforcement is a never-ending task. For such offences, I suggest

⁸⁶ Canadian Environmental Law Association, pp. 146–149.

that the government consider the implications of providing that violations of source protection regulations should be included as a matter covered by the right to sue for harm to a public resource, as contemplated by sections 82 to 102 of the *Environmental Bill of Rights*.

13.5.5 Regulation of Accredited Bodies

In matters relating to the safety of drinking water, the distinction between accreditation and regulation becomes relevant in at least two contexts: the operation of environmental laboratories and the operation of water systems. Under Ontario Regulation 459/00, environmental laboratories that test drinking water samples are now required to be accredited. The Canadian Association of Environmental Analytical Laboratories (CAEAL) is the accrediting body. I discuss this arrangement in Chapter 9.

In terms of the operation of water systems, I recommend two things. First, that the government require the owners of municipal water systems to have an accredited operating agency. Second, I recommend that owners be required to have an operational plan in place for their system, for functional approval and review by the MOE.⁸⁷ These recommendations are discussed in Chapter 11, and in the current chapter as they relate to MOE approval of municipal water systems.

The purposes of accreditation and regulation should not be confused. The purpose of accreditation is to ascertain whether an organization has appropriate systems and personnel in place to perform effectively, with periodic audits to ensure continued competency. The purpose of regulation, on the other hand, is to set out standards within which water providers must function and to ensure there is adequate oversight and enforcement in relation to those standards, that is, regulatory compliance. Although there may be some overlap between accreditation and regulation, it is important to be clear that accreditation is not a substitute for regulatory oversight.

⁸⁷ No doubt, water providers will want to develop effective operational plans as part of their overall quality management system. However, I recommend that this be made a formal requirement in order to separate operational aspects of the water system from the Certificate of Approval, and to allow for greater focus by MOE personnel on the multi-barrier strategies that are adopted at the plant – or facility – level.

How the government carries out its regulatory role will, of course, evolve once accreditation is well established. If accreditation is successful in raising capability across the industry, regulators will be able to focus their attention on a smaller number of more specifically defined compliance problems. From a practical point of view, MOE inspections of water systems run by an operating agency with a proven quality management system would not need to be as frequent as for other water systems. Further, it is not realistic to expect regulatory staff to have the same level of detailed knowledge and experience with water systems as do the leading members of the water industry, or to expect them to specify precisely what water providers need to do to improve performance. On the whole, accreditation should be designed and implemented so as to make regulatory assessment of compliance more effective. In terms of the concern expressed by some parties at the Inquiry that accreditation would create an alternative regime that would, in time, undermine the provincial regulatory system, the Province simply should not allow this to happen.

Let me repeat a point I made earlier. I consider the government's regulatory role to be essential. Some argue that the government in the past has not exercised this role well – the Walkerton tragedy being the prime example. Indeed, I was very critical in the Part 1 report about the manner in which the government's regulatory role was exercised in relation to Walkerton. I have no doubt that improvements are required.

However, I do not accept that the government is not capable of competently carrying out its regulatory role. On the contrary, I am satisfied that with leadership, the allocation of adequate resources, and a recognition that the safety of Ontario's drinking water is of prime importance, the government can put in place the necessary people and programs to regulate the operation of water systems and environmental testing laboratories effectively. In my view, if the government implements the recommendations in this report and those in the Part 1 report, it will be able to fulfill its regulatory and oversight responsibilities.

13.6 The Role of Other Ministries

Up to this point, the focus of my comments on government oversight has been on the MOE. However, although the MOE has had the largest part of the oversight role in regard to drinking water safety and although I have recommended that it continue to have the role of lead ministry, significant

roles have been played and will continue to be played by other ministries. Most significant among them are the Ministry of Health and Long-Term Care (Ministry of Health) and the Ministry of Agriculture, Food and Rural Affairs (OMAFRA). Important roles are also played by the Ministry of Municipal Affairs and Housing (MMAH) and the Ministry of Natural Resources (MNR). I will deal with each of these in turn.

13.6.1 The Ministry of Health and Long-Term Care

As was evident from a review of the facts surrounding the tragedy in Walkerton, the Ministry of Health plays a significant role in the delivery of safe drinking water. I have discussed this role both in general and in relation to the events in Walkerton in the Part 1 report of this Inquiry. 88 I will not repeat that discussion in any detail, but I summarize the central point for ease of reference here:

- For matters of drinking water safety, the relevant part of the Ministry of Health is the Public Health Branch, headed by a director who is also the Chief Medical Officer of Health of Ontario.
- The role of the Public Health Branch is threefold:
 - to manage funding for public health programs;
 - to advise the Minister of Health on matters relating to public health;
 - to provide advice and assistance to local health units.
- Each local health unit⁸⁹ must have a board of health which is administered by a local Medical Officer of Health (MoH).
- The office of the MoH is established under the *Health Protection and Promotion Act*. The appointment of the MoH (approved by the Minister of Health) is made by the Governor-in-Council. The MoH reports to the local board of health. The independence of the office is protected by a

⁸⁸ See the Part 1 report of this Inquiry, pp. 246–263.

⁸⁹ Health units are local health agencies established by a municipality (e.g., Toronto Public Health) or a group of municipalities to provide community health programs. They are funded by the province and relevant municipalities.

provision that an MoH can only be dismissed with the written consent of two-thirds of the members of the local Board of Health, as well as that of the Minister of Health.

- Among the programs administered by local health units, two are relevant to drinking water: the Control of Infectious Disease Program and the Safe Water Program. The Ministry of Health sets minimum standards in respect of both programs.
- Pursuant to the Safe Water Program, health units are required to:
 - maintain an ongoing list of all drinking water systems;
 - receive reports of adverse drinking water test results from the systems;
 - have a written protocol for dealing with adverse results; and
 - "act immediately" in accordance with the ODWO (now ODWS) "to protect the health of the public whenever an adverse drinking water result is received."
- The traditional role of the local health unit and the MoH in relation to drinking water has arisen after the point where drinking water leaves a tap. In other words, the MoH's main responsibilities have arisen when there is a potential that people will become sick from the water.
- Health units did receive notice of reports of adverse water quality as well as MOE inspection reports. However, as I found in Part 1, there was some confusion and a lack of direction to local units regarding how to respond to such reports.
- Health units generally do not consider it part of their mandate to oversee the operation of water treatment and distribution systems within their jurisdiction.
- Once a potential public health outbreak is reported, the health unit investigates; if drinking water is found to be the cause, the health unit has the power to issue a boil water advisory.⁹⁰

⁹⁰ Health Protection and Promotion Act, s. 13 [hereafter HPPA].

• There is currently no protocol in place to provide guidance regarding when to issue a boil water advisory. 91

Local health units play another function that was not directly relevant to the events in Walkerton but is important to the safety of drinking water. In regard to private water systems, they interpret water analysis reports, provide information regarding the potential health effects, and provide information about the health-related parameters in the Ontario Drinking Water Standards (ODWS). This is an important function: Ministry of Health laboratories and local boards of health were swamped with inquiries from private well owners after the Walkerton tragedy.

Ontario's public health system has undergone a significant evolution in the past 20 years, from being a fragmented system of about 800 boards of health to becoming a more organized and coordinated system composed of 37 health units. These units vary significantly in terms of the numbers of people they serve, from 40,000 at the low end to more than 2.6 million in the City of Toronto.

Both the Association of Local Public Health Agencies (ALPHA) and the Ontario Medical Association (OMA) made submissions regarding local boards of health. Their submissions focused on two issues: the need to ensure adequate resources to allow boards of health to fulfill their functions, and the need to clearly set out the roles and responsibilities of public health boards. Although the information before me was not extensive, both submissions are supported by the information and evidence brought to my attention. On the question of funding, the Ministry of Health has, since the early 1990s, increased the responsibility of boards of health without increasing the funding required to fulfill those responsibilities. The result has been that boards' compliance with ministerial requirements has decreased. A 1999 compliance survey carried out by the ministry found that compliance with the Mandatory Health Programs and Services Guidelines was only 75%. On the point of clearer roles and

⁹¹ The Province has developed a draft protocol: Ontario, Ministry of Health and Long-Term Care (Public Health Branch), 2001, "Protocol for the issuance of a boil water or a drinking water advisory." See also section 11.6.3.3 of the report of the Walkerton Inquiry, Part 2, for a discussion of the draft protocol.

⁹² The OMA has cited the example of the new provincial requirement that all school children be given a two-step measles vaccination. Because no funding was given, boards of health had to suspend or cut back other programs. Ontario Medical Association, 2001, "Protecting the public's health," Walkerton Inquiry Submission, p. 3.

⁹³ Ibid.

guidelines, the evidence in Part 1 of the Inquiry suggested that there was confusion about what the role of the Ministry of Health was or should be in relation to drinking water. This was particularly the case in regard to the issue of what action the Ministry of Health should take in the face of adverse test results and unsatisfactory inspection reports received from the MOE.

13.6.1.1 Recommendations and Comments

13.6.1.1.1 Role of the Local Health Units

In the Part 1 report of this Inquiry, I made three recommendations aimed at clarifying and improving the role of the Board of Health in relation to drinking water safety:

- The Health Protection and Promotion Act should be amended to require boards of health and the Minister of Health, acting in concert, to expeditiously fill any vacant Medical Officer of Health position with a full-time Medical Officer of Health (MoH).
- The role of local Medical Officers of Health and health units in relation to public health issues concerning treated and untreated municipal water systems should be clarified and strengthened. In particular, clarification is required as to whether local Medical Officers of Health are required to implement a proactive approach to responding to adverse drinking water sample test results upon receiving notification of those results.
- Written guidance developed in cooperation with local Medical Officers of Health and the Ministry of the Environment – should be provided to the local Medical Officers of Health by the Public Health Branch. It should include steps to be taken by Medical Officers of Health upon receipt of Ministry of the Environment inspection reports and adverse drinking water sample test results.

In regard to the Medical Officer of Health (MoH) position, section 62 of the *Health Protection and Promotion Act* (HPPA) requires every board of health to have a full-time MoH. I heard evidence in Part 1 and submissions were made in Part 2 that a significant number of boards of health had MoH positions vacant. This is particularly an issue for boards that are not near a major urban

centre. In addition, while the HPPA permits the appointment of an acting MoH where there is no MoH or associate MoH, there is no requirement that the acting MoH have any of the skills required for the position and there is no time limit within which a permanent MoH must be appointed.⁹⁴

The MoH plays a vital role in maintaining public health in general, including preventing or limiting the spread of illness resulting from drinking water. It is not a position that a community should do without for any substantial length of time. If the position is difficult to fill because of a structural issue (e.g., more pay is required to have professionals agree to work in remote communities), the Ministry of Health should correct these problems.

The second and third recommendations arose from shortcomings identified in Part 1 of the Inquiry. In Walkerton, inspection reports and adverse water quality reports were received by the health unit, which did little if anything in response to such reports. As noted in Part 1, I do not fault the health unit staff for this lack of action. They were given no direction from either the ministry or the management of the health unit about what to do in these circumstances. To rectify this shortcoming, I recommend that a protocol be developed. The protocol will require further development after consultations among the MOE, the Ministry of Health, and the local health units, but its basic elements should include the following:

- Prime responsibility for treatment and distribution facilities, including responsibility for ensuring that they are compliant, should remain with the MOE. (I do not want to create a system of overlapping roles, in which confusion may arise about who is ultimately responsible.)
- The receipt of either an inspection report noting a deficiency or an adverse sample report should "engage" the health unit.
- The relevant water treatment plant should immediately be posted conspicuously at the health unit so that if illness is reported, drinking water is immediately identified as a potential cause that has a higher than normal likelihood of possibility.
- The health unit should maintain regular contact with the local MOE office and should take the system in question off "posted" status only

⁹⁴ HPPA, s. 69.

when the deficiency is corrected or when results return to normal for a reasonable period of time.

• In cases of chronic problems with any system, the health unit should embark on an education campaign that is aimed particularly at vulnerable elements of the population.

In addition, I have one further recommendation regarding the role of the local health units.

Recommendation 77: A steering group should be established within each public health unit area in the province, comprised of representatives of affected local hospitals, municipalities, local Ministry of the Environment offices and local boards of health, for the purpose of developing in a coordinated fashion emergency response plans for the control of, or the response to, infectious diseases and public health hazard outbreaks.

Local medical officers of health should have input into and help facilitate the development of public health aspects of emergency response plans for municipalities and hospitals within their geographical area of responsibility. I have included in section 11.6 the requirements of an emergency response plan for water providers. I think it would be useful, as well, for there to be a response plan on a community-wide basis.

13.6.1.1.2 Health Unit Resources

It was submitted in both Parts 1 and 2 of the Inquiry that local boards of health had insufficient resources to fulfill their mandates. This Inquiry has not focused on public health boards, and I do not have enough information to make specific recommendations about the adequacy of resources. I note, however, that from the evidence I have heard, including the compliance rates discussed earlier, there is a clear need for further study by the government. I recommend that the Ministry of Health take steps to obtain better information and, when conclusions can be reached, make the required adjustments. I note that the Ontario Medical Association has submitted that such adjustments should not necessarily be limited to increasing resources. For example, it may be appropriate to reorganize boards so that all have viable population bases. I will not comment on the need for reorganization, but I agree that all options

should be explored. In the end, however, if further resources are required to enable local boards of health to fulfill their mandate as it relates to safe drinking water, the provincial government should ensure that a system is in place to make such resources available. There is no room to compromise the important role played by the local boards of health.

13.6.1.1.3 Information Available to Health Units

In the Part 1 report of this Inquiry, I made two recommendations about the need to improve the information made available to local boards of health.

- Regular meetings should be scheduled between the local Ministry of the Environment office and local health unit personnel to discuss public health issues, including issues related to waterworks facilities as documented in Ministry of the Environment inspection reports. Any affected operator or laboratory should be invited to attend the meeting.
- Upon the implementation by the Ministry of the Environment of the Integrated Divisional System (management information system), access to it should be made available to local health units and, where appropriate, to the public. This should include access to profiles of municipal water systems and to data concerning adverse drinking water quality sample test results, as included in that database.

I was fortunate to be able to tour a number of treatment and distribution systems during the Inquiry. I was very impressed and took great comfort from those municipalities where the local MoH had a good understanding of the system. I think that an understanding of the local systems is critical to the role of an MoH. I recognize that it will be easier to fulfill this role in larger urban centres that have relatively few treatment and distribution systems in the area covered by the local health unit. In such areas, meetings might be site-specific. Unfortunately, the need for the MoH to have a good understanding of systems is probably the greatest in more sparsely populated areas, where regular site visits are likely to be impractical. In such areas, it is particularly important that the local health unit have regular meetings with the MOE to be briefed on the problems or idiosyncrasies of each system.

The ability of the local health unit to perform its role will also be enhanced by granting it access to the Integrated Divisional System when it is operational.

13.6.2 The Ontario Ministry of Agriculture, Food and Rural Affairs

As discussed in Chapter 4, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) plays a significant role in regard to the environmental regulation of farmers. As I set out in detail above, in my view, elements of this function, including possible new initiatives like individual farm water protection plans, should be moved to the MOE. An approach has developed within the provincial government that separates the environmental impact of farming operations from all other environmental impacts. I do not think that this separation has been helpful to the ultimate goal of source protection. In my view, source protection measures should be aimed at all land users equally. This is not to say that agriculture does not have unique considerations; it clearly does. However, the likelihood of achieving an effective comprehensive policy increases when it is created and implemented by an entity the primary focus of which is the environment. Obviously, OMAFRA has and will continue to have expertise in regard to agriculture. For this reason, it is important that there be clear channels of communication between the two ministries. In addition, it will be important for the MOE to develop or, if possible, inherit an agricultural expertise.

My recommendation is not intended to result in the elimination of any role for OMAFRA. I have included a number of recommendations in Chapter 4 that involve assistance from that ministry.⁹⁵

13.6.3 Other Ministries

As set out in Chapter 2, the Ministry of Natural Resources (MNR) and the Ministry of Municipal Affairs and Housing (MMAH) currently play peripheral roles in relation to drinking water safety.

I do not envisage a markedly different role for the MNR as a result of my recommendations. I think it is appropriate that it continue to function as the lead ministry for programs related to water quantity. However, my comment must be taken in the context of what I have recommended at the outset of this chapter — that the MOE should be given the lead role in developing and implementing the government's policy for safe drinking water. As a result, there must be consultation between the MOE and the MNR; and MNR programs,

⁹⁵ See Recommendations 11, 15, and 16.

to the extent that they affect the safety of drinking water, must be tailored to the overall policy.

In regard to conservation authorities, I see no difficulty in their continuing to fulfill their functions, other than those related to watershed planning, under the auspices of the MNR. However, the watershed planning process should be under the oversight of the MOE. I suspect that the watershed planning function will occupy a large part of the conservation authorities' time and resources. The provincial government should consider whether it makes sense to transfer the oversight of conservation authorities to the MOE.

The government has proposed a new role in sustained asset management for the MMAH. I have recommended a similar role in Chapter 11. As noted earlier, the asset management function must be performed in close cooperation with the MOE. If my recommendations are adopted, the MOE will have the expertise necessary to assess the technical viability of an asset management plan. This must be coordinated with MMAH's expertise in municipal financing.

13.7 Resource Management

The topic of resource management invokes three issues that transcend the entire government oversight function: the need to provide adequate financial resources, the need to improve human resource management, and the need to improve the management of information. Each issue arises repeatedly, both in this chapter and elsewhere in this report.

13.7.1 Financial Resources

Limited financial resources have become a reality of modern-day government. In the past decade, governments were elected on platforms based primarily on cost-cutting and tax-cutting. The overall merits of cost-cutting takes me well beyond my mandate, but what is relevant to the issues directly before me is the effect that inadequate resources or insufficiently considered cost-cutting measures have on the safety of the drinking water system. A number of parties in both Part 1 and 2 of the Inquiry commented on the effects of budget cuts and the lack of sufficient resources to effectively carry out the government oversight functions. I have already commented on this issue, specifically in relation to inspections, enforcement, and local health units. In addition, I

concluded in the Part 1 report of this Inquiry that budget cuts at the MOE had both a direct effect and an indirect effect on the events in Walkerton. The direct effect was the failure to enact a regulation mandating testing laboratories to follow a notification protocol at the time of the privatization of laboratory testing services. The indirect effect was that budget cuts made it less likely that approvals or inspections programs would have led to the discovery of problems at Walkerton. ⁹⁶

13.7.1.1 Recommendations and Comments

Recommendation 78: The provincial government should ensure that programs relating to the safety of drinking water are adequately funded.

In my view, questions relating to the adequacy of financial resources, particularly in regard to drinking water, must be made in the context of the effect such decisions have upon safety. This applies equally to questions of whether a program should be offered in the first place, whether it should be scaled back, or whether it should be eliminated altogether. In the face of such decisions, the government should conduct a risk assessment in which the risks that might result from the decision are identified and assessed. As I have noted elsewhere in this report, the approach to risk assessment should be precautionary in always erring on the side of caution.

The Government of Ontario should also conduct a review of all current programs that are concerned with the safety of drinking water to assess whether those programs are adequately financed. Financial strains exist in a number of programs, including inspections, enforcement, and the local public health function. Concern about the adequacy of resources has also been raised by the municipalities. In each case, the provincial government should conduct a review of the program to determine the level of risk and the impact on safety that the current level of funding presents. Resourcing decisions should be based on the results of this analysis.

Some parties, including OPSEU, have submitted that I should recommend that MOE funding be restored to some earlier level. Their view is that this would help to bring the MOE back to a level of service that was considered superior. In my view, while I agree that increased funding is necessary, this is

⁹⁶ See the Part 1 report of this Inquiry, pp. 412–413.

not the appropriate way to proceed. In fact, in its random nature, it has the same flaw that some of the cutbacks had. I prefer the approach I have discussed above.

13.7.2 Human Resource Management

Related to the subject of adequate financial resources is adequate human resource management. In addition to the obvious point that greater financial resources will allow the government to employ more human resources, two general themes emerged from Part 1 of the Inquiry and were emphasized in Part 2: the need to improve morale in the public service and the need to ensure that civil servants have the required expertise and training.

As I found in Part 1, the budget cuts and staff reductions of the 1990s had a negative impact on staff morale. The same point was argued in Part 2, particularly in the submissions of OPSEU and also in the issue paper prepared by Mr. d'Ombrain. OPSEU, with particular reference to the MOE, argued that at the root of the morale problem is the fact that the public service has lost some of its sense of purpose. I have not conducted an investigation into staff morale in the Ontario public service and am unable to comment extensively in this regard. However, the evidence in Part 1 and the submissions made in Part 2 provide significant support for the existence of a morale problem, especially within the MOE. It is perhaps obvious to note that good morale is important to an effective public service and that poor morale can hamper the government's oversight function. The provincial government should become proactive with respect to morale and should take steps to improve it.

The second important issue with respect to human resource management is the need to ensure adequate expertise and training. I have dealt with the topic of operator training in Chapter 12 . A similar need to improve training and expertise exists within the government. As I discussed above in connection with inspections, there is evidence that the inadequate training of environmental officers, particularly inspectors, may have played a role in the tragedy in Walkerton.

⁹⁷ See d'Ombrain, pp. 113–114.

13.7.2.1 Recommendations and Comments

I repeat the recommendations I made with respect to the training of MOE staff in the Part 1 report of this Inquiry:

- A full needs assessment for training should be undertaken for Ministry of the Environment technical staff, and a component of that assessment should focus on communal drinking water.
- The Ministry of the Environment, on the basis of the needs assessment, should develop and maintain both introductory and advanced mandatory courses for environmental officers pertaining to communal drinking water systems. These courses should emphasize science and technology, including all matters that could present a risk to public health and safety; emergency pathogen risks; existing, new, and emerging treatment technologies; the limits of particular technologies; and the proper interpretation and application of government regulations, guidelines, and policies.
- The Ministry of the Environment should devote sufficient resources to technical training to allow the ministry to meet the challenges outlined in its "Human Resources Business Plan and Learning Plan for Fiscal Year 2000–2001."

13.7.3 Data Management

I have commented extensively in the Part 1 report about the problems experienced in attempting to access relevant data. ⁹⁸ This concern was echoed throughout the Part 2 expert meetings and public hearings. Problems from inadequate access to data arise in connection with almost all aspects of the drinking water regime from source protection to the obligations of the local boards of health. The problem is not so much that relevant information is not collected but that this information is not stored in a central, easily accessible location. During the Part 2 Public Hearings, I was informed by representatives of the province that the province is committed to the development and implementation of an Integrated Divisional System. This system, I was told, would eventually include the storage of all data related to the regulation of

⁹⁸ See the Part 1 report of this Inquiry, pp. 347–350.

drinking water safety and would allow access to all relevant databanks by all players in the drinking water system, including – where appropriate – the public.⁹⁹

13.7.3.1 Recommendations and Comments

Recommendation 79: The Ministry of the Environment should create an Integrated Divisional System that provides central electronic access to information:

- relevant to source protection;
- relevant to each drinking water system in Ontario (including a description of the system, trend analyses, water quality, and systems data);
- required by the Drinking Water Branch (including for approvals and inspections); and
- required by local boards of health.

The need for better organization of and access to information is important in many areas related to the delivery of safe drinking water. In regard to source protection, there is a wealth of data both in existence and to be collected that is relevant to the recommendations I have made. The problem is that those entities that need it, including conservation authorities, do not always have access to it. If the watershed-based source protection planning process that I recommend is to be effective and efficient, it is important that conservation authorities be given full and free access to all needed information.

As I noted in the Part 1 report, there is also a need for improved access to data in regard to the MOE approval and inspections functions. In Walkerton, MOE employees did not have easy access to information about prior approvals and inspections of the local drinking water system, and that may have made a difference to the actions that were taken or not taken closer to the tragedy. As noted in an earlier section of this chapter, similar improvements are required with respect to access to information by local boards of health.

⁹⁹ R. Breeze, Walkerton Inquiry Submission (Public Hearing, July 23, 2001), transcript pp. 200–215.

13.8 Transparency and Public Access to Information

As a final point in this chapter, I would like to comment briefly on the importance of transparency and public access to information. This theme echoes throughout this report, and I do not need to go into detail about it here. The main point is that because of the importance of the safety of drinking water to the public at large, the public should be granted external access to information and data about the operation and oversight of the drinking water system. In my view, as a general rule, all elements in the program to deliver safe drinking water should be transparent and open to public scrutiny. The only caveat I make, which also relates to public safety, is that the operators and the government must be mindful of the possibility of terrorist attacks on and the vandalism of water systems. With this in mind, the public should, with relative ease, be able to access enough information to satisfy a reasonable person about the safety of the drinking water.

I have commented on the desirability of consumer confidence reports in Chapter 8. Such reports are an excellent means of disseminating relevant information to the public. They should be prepared by the system owner and operator and should set out basic information about the system and provide an annual update on its operation. A consumer confidence report would include information about any deviation from the required standards, the reason for such deviation, and the action taken to correct the problem. The reports could be included, once a year, with the local water bill.

Some parties in Part 2 recommended that continuous on-line monitoring be available to the consumer so that any member of the public could access monitoring information on the Web. Such Web sites are available in the United States. ¹⁰⁰ While I have no objection to such systems, I am not recommending that they be implemented. Although such systems contain a good deal of information, in my view they will not be of much use to the average consumer. The combination of consumer confidence reports, an effective emergency response plan, and the annual province-wide reports I have recommended below will give consumers a more digestible, and ultimately more useful, package of information.

¹⁰⁰ See, for example, the Des Moines, Iowa, water works Web page: http://www.dmww.com/empact.asp.

13.8.1 Recommendations and Comments

Recommendation 80: The Drinking Water Branch should prepare an annual "State of Ontario's Drinking Water Report," which should be tabled in the Legislature.

To ensure transparency and keep the public apprised of the state of Ontario's drinking water system, including the state of the government's oversight role, a report should be prepared by the Drinking Water Branch and presented by the Minister of Environment to the legislature every year. The report should review, on a province-wide basis:

- the quality of source water and a review of source protection initiatives;
- drinking water standards, including discussions of new and emerging pathogens;
- the results (pass/failure rates) of inspections and accreditation audits; and
- a summary of enforcement activities.

The reports would not provide the same level of individual system details that consumer confidence reports do, but they should provide sufficient detail to allow an educated member of the public make an assessment of the government's performance of its oversight function.