

**Chapter 12 Other Government Policies, Practices,
and Procedures**

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Chapter 12 Other Government Policies, Practices, and Procedures

12.1 Introduction

The Inquiry heard evidence about several government policies, practices, and procedures that I have concluded were not causes of the outbreak in May 2000 and had only a remote, if any, connection to the events in Walkerton. However, I will briefly discuss the more significant ones here to explain my conclusions and in one instance to provide support for recommendations I will be making in the Part 2 report of this Inquiry.

The following provincial initiatives are summarized in this chapter: the *Energy Competition Act* (Bill 35); municipal restructuring; the “Who Does What” policy; provincial grants and loans to municipalities; the municipal financing of waterworks; Ontario Ministry of Agriculture, Food and Rural Affairs programs; the groundwater management strategy; employee morale in the Ministry of the Environment; and land use planning.

12.2 The *Energy Competition Act*

Until the late 1990s, public utilities commissions commonly provided both water and electricity in Ontario. This situation changed with the passage of the *Energy Competition Act*, still known as “Bill 35,” which received royal assent on November 7, 1998. The Inquiry heard evidence from several witnesses that between 1998 and May 2000, municipal officials and the Walkerton Public Utilities Commission (PUC) were preoccupied with Bill 35’s repercussions and were not focused on drinking water. Although this may have been the case, I do not find a connection between the passage of Bill 35 and the events in Walkerton in May 2000.

The *Energy Competition Act*, passed in response to the recommendations of the Macdonald Report,¹ paved the way for increased competition in the energy sector. It restructured the electricity distribution system in order to dismantle Ontario Hydro’s monopoly and required municipalities to decide whether to

¹ *A Framework for Competition: The Report of the Advisory Committee on Competition in Ontario’s Electricity System to the Ontario Minister of Environment and Energy* (Toronto: Queen’s Printer, 1997).

keep, sell, or lease their electrical utilities by November 2000. Section 142 of the Act required a municipality that retained its electricity distribution assets to incorporate the utility under the *Ontario Business Corporations Act*. This left municipalities to decide whether to keep the remaining public utilities commissions that were responsible for water as separate entities (alone or affiliated with another corporation), or whether to turn them into municipal departments. They could do this more easily after the passage of Bill 26, the *Savings and Restructuring Act* (the “Omnibus Bill” amending the *Municipal Act*), which gave municipalities the power to disband public utilities commissions without a plebiscite.

Municipal officials and the Walkerton PUC were aware of the *Energy Competition Act* and its repercussions. In 1996, Stan Koebel and the PUC’s chair, James Kieffer, wrote to the Minister of Finance urging the government to act on the recommendations of the Macdonald Report and end Ontario Hydro’s monopoly. In 1998, Walkerton’s town council debated the content of Bill 35 and its potential impact on the Walkerton PUC. In 1999, the Ministry of Energy, Science and Technology sponsored workshops throughout the province to inform municipal electricity distributors and corporations about the new rules and responsibilities under Bill 35. Brockton mayor David Thomson, municipal clerk Richard Radford, and Stan Koebel attended the workshop in Owen Sound. The Municipality of Brockton passed a bylaw in August 1999 to create the Brockton and District Utilities Corporation, in compliance with section 142 of the *Energy Competition Act*. All municipal hydro assets were transferred to the corporation in order to be held by it. Brockton considered sharing services with neighbouring utilities. On October 25, 1999, its municipal council passed a resolution leaving the water services under the jurisdiction of the Walkerton PUC.

The issue of whether the PUC should continue to operate what was referred to in evidence as the “water side” was still being discussed in 2000. The municipality’s lawyer told the Brockton council that it had three options: leave the water side to stand alone; form an affiliate corporation; or transfer the water services to the municipality and operate it as a municipal department. Mr. Radford and Mark Gaynor, the municipal treasurer/tax collector, prepared a report for the council concluding that the third option – making water services a municipal department – was economically viable. The council decided on March 16, 2000, that the PUC would continue to exist and would provide contract services to the Brockton and District Utilities Corporation. Nonetheless, John Strader, the works superintendent, prepared a report for the council

dated April 28, 2000, summarizing a meeting he had had with Stan Koebel. The report described the possibility of creating the position of waterworks superintendent within the municipal Works Department. The council decided on May 1, 2000, to have the proposed position evaluated by a compensation expert. It had not made a decision regarding Mr. Strader's report by the time the tragedy struck later that month.

James Kieffer, Richard Field, and David Thomson all testified that Bill 35 affected their roles as public utilities commissioners in that they spent a great deal of time discussing alternatives relating to the PUC's hydro responsibilities rather than those relating to water. Mr. Kieffer said that Stan Koebel would have had a job no matter what happened to the PUC. According to Mr. Kieffer, Mr. Koebel could have worked on the hydro side, even if it were operated by another company. Mr. Kieffer testified that Mr. Koebel also could have stayed with the PUC if it kept the waterworks, or could have worked for the municipality if it had taken over the waterworks.

Stan Koebel testified that before the passage of Bill 35, he spent about 20% of his time on water and the remainder on electricity; after November 1998, about 5% of his time was spent on water. He did not understand that he was to be interviewed for the position of municipal waterworks supervisor. He thought that if the waterworks responsibility were given to the municipality, he would apply for a position with the new electricity company. He felt that because of the time taken up by the discussions concerning the PUC's electricity business in relation to the waterworks, he was "losing it" – meaning, losing control.

Frank Koebel testified that Bill 35 created uncertainty among the PUC employees about whether they would be able to keep their jobs. This resulted in tension and unhappiness in the workplace. He thought that Stan Koebel would have been concerned about his own position and about the time spent in meetings trying to come up with a solution to Bill 35's requirements.

Even if the atmosphere was stressful, however, I find that the implementation of Bill 35 did not make it substantially more difficult for the PUC employees and commissioners to do their jobs properly. The problems at the PUC lay in the lax attitude toward disinfection, sampling, and monitoring, and the failure to do these things properly. No one testified that with more time to work on the water side, they would have started conforming and complying with MOE guidelines and directions. Indeed, these improper practices had gone on for years before the passage of Bill 35. Moreover, the primary problem I have

found with the Walkerton PUC commissioners was their failure to properly respond to the 1998 MOE inspection report. That also preceded the passage of Bill 35.

12.3 Municipal Restructuring

I heard evidence about the impact of municipal restructuring on Walkerton. As with the Bill 35 evidence, there were suggestions in testimony that the preoccupation created by this change might have affected the ability of local officials to turn their minds to drinking water safety. I do not accept that there was a connection between municipal restructuring and the events of May 2000: I will briefly review the evidence here in order to show why.

The County of Bruce had undertaken county restructuring studies in 1975 and again in 1990. Both studies were defeated by county council and never implemented. In the fall of 1996, county council formed a restructuring committee to revisit the issue of restructuring. This process began with review of the 1990 study. Bruce County decided to initiate restructuring again after the passage of Bill 26 in order to avoid having restructuring carried out by the province on the province's terms.

Bill 26, the *Savings and Restructuring Act*, was the most significant recent change to provincial legislation affecting municipalities. Passed in 1996, the "Omnibus Bill" provided municipalities outside of regional municipalities with the necessary legislative tools to develop and implement local restructuring proposals. Amalgamation is one form of municipal restructuring. As a consequence of amalgamation, the number of municipalities in Ontario decreased from 815 to 447 between 1996 and 2001.

Part of the restructuring of Bruce County that became effective on January 1, 1999 was amalgamation of the Townships of Brant and Greenock with the Town of Walkerton to create the Municipality of Brockton. The restructuring order under the *Municipal Act* dissolved the former Walkerton PUC, but re-established it under the same name to distribute and supply electrical power and to produce, treat, distribute, and supply water to the geographic area of the former Town of Walkerton. In March 1999, the Brockton municipal council passed a resolution to transfer responsibility for operation and maintenance of a small waterworks in Chepstow (formerly in Greenock) and another on Geeson Avenue (formerly in Brant) to the Walkerton PUC. The addition of these two

water systems created additional work for the PUC staff. Staff had to drive to each of the well locations to conduct sampling, and were required to perform maintenance on the wells. The Chepstow well house was found to be substandard. Stan Koebel took primary responsibility for upgrading the Chepstow and Geeson Avenue waterworks.

Richard Radford agreed with the statement that “this was kind of a unique time with a lot of pressure and everybody was working pretty hard.” However, although the PUC was given some additional responsibility, there was no indication that this responsibility rendered it incapable of attending to the safety of the drinking water supply as a whole. During the time that amalgamation was being implemented, Stan Koebel did not make a request for additional staff – nor did he tell the commissioners that the post-amalgamation structure made it impossible for him to perform his duties properly. He failed to execute his duties properly for reasons canvassed in other areas of this report.

I have considered whether municipal amalgamation resulted in the loss of an opportunity to correct the Walkerton PUC’s deficient disinfection and monitoring practices after its receipt of the 1998 Ministry of the Environment (MOE) inspection report. Indeed, there was evidence that Walkerton’s town council considered the option of hiring a director of public works when it discussed the report at its June 8, 1998, meeting but that this did not occur because the council was going to be replaced in January 1999. However, I am not persuaded that even if the council had held office for a full three-year term, it would have taken that significant step in the face of Stan Koebel’s assurances to the PUC (on May 20, 1998) and to the MOE (in his letter of July 14, 1998) that the Walkerton waterworks system would conform to MOE directives.

12.4 The “Who Does What” Policy

The “Who Does What” provincial policy initiative reorganized and clarified provincial and municipal roles in the late 1990s, including the responsibility for waterworks. The Inquiry heard evidence on this policy, but in the end I find no clear connection between that policy and the events of May 2000. The Local Services Realignment Program implemented many of the Who Does What recommendations, including the transfer of provincially owned waterworks to municipalities. Walkerton, however, had always owned its own waterworks and was not affected by this change.

The need to redistribute responsibilities and rationalize program administration between the provincial and municipal governments had been recognized since at least as early as the 1980s. There were various attempts to discuss and negotiate what should be done, but there was no overhaul of the system until 1996. Bill 26 set up the legislative framework for reform in provincial-municipal relations. The Who Does What panel was appointed to recommend ways to make the allocation of responsibilities between local and provincial governments more efficient, and to make both levels of government more accountable. It focused on ways to eliminate a duplication of regulation in areas where there were blurred responsibilities between the two levels of government. The Transportation and Utilities Subpanel addressed water and sewage issues and reported by letter to the Minister of Municipal Affairs and Housing, Allan Leach, on November 4, 1996.

The reporting letter confirmed municipal responsibility for water and sewer infrastructure and services. It expressed the view that municipalities should own, operate, and finance water and sewer systems, and that the province should focus primarily on enforcing standards and promoting conservation. The reporting letter recommended the following: that municipalities be encouraged to move to full-cost pricing for drinking water; that once they were brought into compliance with provincial standards, provincially owned facilities should be transferred to municipalities; and that provincial grants and loans should be eliminated and municipalities should finance their own future needs on the basis of their access to the private market – except when one-time funding was needed to address health or environmental risks. The sub-panel's recommendations were accepted and adopted by the provincial government, and the question of how to bring provincial facilities into compliance was left open.

Many municipalities were affected by the Who Does What panel's report because of the resulting transfer of ownership of hundreds of waterworks systems from the province to the municipalities. The Local Services Realignment affected the transfer of water and sewage works worth \$400–\$500 million (in addition to the province forgiving loans worth approximately \$130 million in 1985–86). Walkerton, however, had always owned its own waterworks. Richard Radford, the town's senior administrator, did not believe that the Local Services Realignment resulted in the diminution of the municipality's ability to provide safe drinking water. I agree with him.

I am satisfied that Walkerton's drinking water safety was not affected by the changes brought about by the Who Does What initiatives.

12.5 Provincial Grants and Loans to Municipalities

The Province of Ontario provided grants and loans to municipalities for waterworks and related infrastructure and programs. Provincial funding levels changed over time, and I will briefly review the amount of provincial funding received by Walkerton. It appears that Walkerton did not take advantage of all of the funding that was available to it. It is unfortunate that several of the provincial programs were primarily directed at distribution systems (infrastructure) rather than water quality (treatment and monitoring), on the assumption that groundwater was safe. In the end, however, the tragic events in Walkerton were not due to a lack of provincial grants and loans to that municipality or its successor.

Through various funding programs, the Province of Ontario has contributed approximately \$4 billion to waterworks and sewage infrastructure throughout the province since 1956.

In the late 1970s and 1980s, the decision makers of the Walkerton PUC generally preferred “to solve the problems on their own” rather than apply for provincial funding for waterworks projects.

Between 1990 and 1999, Walkerton received funding under the Direct Grant Program to assist three of its projects: two sewer projects and a communal drinking water project. The latter was the replacement of a watermain on McGivern Street, for which Walkerton received \$50,065.42, or 50.28% of the project cost of \$99,565.25.

Walkerton received funding for four projects between 1987 and 1992 under the Lifelines Program. One of the projects related to the sanitary collection system, and three related to the water distribution system. Of the three projects, two of the grants covered 33.3% of the cost of replacing water mains (\$42,447.02 of \$127,353.79, and \$52,897.21 of \$158,707.49, respectively). The Lifelines Program also paid \$9,432 toward a project cost of \$16,995 (55.5%) for the water distribution system rehabilitation needs study prepared by B.M. Ross and Associates Ltd. The total amount of drinking water-related funding received under the Lifelines Program was \$104,776.23.

As a result of the Canada/Ontario Infrastructure Works programs I and II, Walkerton received a total of \$540,425. The Canada/Ontario Infrastructure Works program I, designed as a three-year, \$2.1 billion federal cost-shared

program, was introduced in 1994. Cost-sharing was one-third federal, one-third provincial, and one-third municipal. Ontario's contribution was approximately \$720 million, and the projects with the province had a total value of \$2.2 billion. The Canada/Ontario Infrastructure Works program II was introduced in 1997 as part of a one-year, \$1.275 billion top-up to Canada/Ontario Infrastructure Works program I. This money was invested under the same cost-sharing arrangements, and Ontario's contribution was approximately \$172 million. Drinking water-related infrastructure projects funded under program I included the warning and backup system for the water distribution system (actual project cost, \$98,963; federal/provincial grant, \$61,698), the Yonge Street watermain replacement project (actual project cost, \$224,713; federal/provincial grant, \$121,290), and the Hinks Street watermain replacement project (actual project cost, \$93,418; federal/provincial grant, \$62,278). Three sewage projects having an aggregate actual project cost of \$98,463 were funded under program I. None of the \$40,742 of program II funding was applied to waterworks projects.

The Provincial Water Protection Fund was a \$200 million fund created in 1997 as part of the Municipal Capital and Operating Restructuring Fund. The new program was part of the Who Does What policy and was intended to fulfill the provincial government's commitment to assist municipalities in their transition to full responsibility for financing and operating water and sewage services. The fund consisted of two parts. One part provided funding for the construction of water and sewer infrastructure projects to address immediate health and environmental problems. The second part provided funding for studies of environmental issues, water and sewage system optimization, and groundwater management and regional servicing studies. These studies were intended to encourage conservation, the protection of water resources, and the reduction, elimination, or deferral of the need for capital works.

Richard Radford testified that Walkerton had evaluated the Provincial Water Protection Fund guidelines and had considered repairs to its sewage collection system and sewage treatment plant under this program. However, Mr. Radford, in consultation with the MOE, concluded that Walkerton's discretionary reserve funds were too large for the town to meet the financial eligibility criteria of the Provincial Water Protection Fund program. Consequently, the municipality did not apply for funding under this program. It should be noted that the financial eligibility criteria did not apply to the groundwater management study portion of the Provincial Water Protection Fund.

The Municipality of Brockton was notified of the groundwater management study funding. Stan Koebel requested, and the MOE sent, the groundwater management study guide and application. The groundwater management study funding could cover such initiatives as the formulation of a groundwater management plan, which identified the planning steps, including establishing well-head protection zones and groundwater protection policies. Groundwater management studies were funded within Huron and Oxford Counties – areas that faced issues similar to those faced by Walkerton.

The provincial government left it to the municipalities to apply for funding to conduct a groundwater management study. It did not target communities with problematic water sources, and no particular municipalities were encouraged to apply. It would have been preferable for Walkerton to have been encouraged to apply, because the MOE had information on file showing that the town clearly had source problems with Well 5.

Mr. Radford testified that Walkerton did not consider seeking funding under the Provincial Water Protection Fund to locate a new water source, although in 1999 it considered developing an additional groundwater source on land that it already owned.

I find that the funding structures were not a problem in themselves; rather, the Walkerton PUC did not know how to make the best use of available funding. It is, however, simply too speculative to conclude that there would have been any different outcome in May 2000 if Walkerton had applied for funding from the Provincial Water Protection Fund.

12.6 The Municipal Financing of Waterworks

The Inquiry heard evidence on the workings of municipal finance in general, and on the finances of the Municipality of Brockton and the Walkerton PUC in particular. It appears that Brockton was a fiscally conservative municipality with substantial reserve funds and the capacity to borrow more money than it did. The various provincial laws and policies on municipal finance had no connection to the events of May 2000. Nor did a shortage of municipal funds affect drinking water safety.

Municipalities can raise revenue from several sources: taxation on property assessment, payment in lieu of taxes, development charges, user fees, licence

fees, fines, and transfers from the provincial and federal governments. Property taxes comprise approximately 47% of the municipal “own source” revenue of most municipalities, depending on how many residential properties are in the municipality.

Richard Radford characterized the Municipality of Brockton as fiscally conservative. The municipal finance panel members agreed that this is the case for most Ontario municipalities – for example, many do not borrow the maximum possible amount of money.

There are controls on municipal finances. Each municipality has an annual repayment limit, equivalent to 25% of municipal own-source revenue. This is the limit beyond which a municipality cannot borrow in a year without the approval of the Ontario Municipal Board.

Mr. Radford confirmed that Brockton’s annual repayment limit in 2000 was \$1,209,981. However, he said that in reality, the limit would never be reached because Brockton would not be able to raise enough taxes or other revenues to service the debt.

If the Walkerton PUC wanted to borrow money, it required permission from the Municipality of Brockton. The PUC was required to submit a list of its reserves at the end of each year, to be approved by the municipal council, so that these funds could be reserved for future years. The municipality had control over the PUC reserve funds, so it could actually take PUC reserves and put them into the municipality’s reserve funds.

The total reserves and reserve funds for the Town of Walkerton at the end of December 1998 were \$946,458. As a result of the municipal amalgamation on January 1, 1999, the municipality’s debt capacity increased. The reserve funds for the Walkerton PUC were \$449,401 at the end of December 1998. At the end of 1999, the balance in the PUC reserve fund was approximately \$347,000. The PUC’s capital reserve fund of \$100,000 was deposited into the water reserve account on December 4, 1999. These funds were specifically allocated to pay for three particular watermain improvement projects.

Mr. Radford was not aware of any PUC capital project that Walkerton or Brockton had been unable to fund. He said that in-year changes did not detract from the municipality’s ability to provide safe drinking water.

Walkerton and, later, Brockton had ample funds on hand – and the capacity to borrow more – to ensure that the PUC’s infrastructure, equipment, and staff were sufficient to deliver safe drinking water. Neither provincial policies on municipal finance nor the financial status of Walkerton contributed to the events of May 2000.

12.7 The Privatization of Municipal Waterworks

It was argued at the Inquiry that the failure of the Walkerton PUC and the Municipality of Brockton to engage a private operator to run the Walkerton water system contributed to the events of May 2000. It was also argued that the Province did not do enough to promote municipalities’ use of private waterworks operators. I find the issue too remote to reach such conclusions.

Until the PUC’s dissolution in January 2001, it would have been the PUC’s decision as to whether to seek an alternative operator of the Walkerton system. There is no evidence that the PUC considered the possibility of turning to an alternative operator, whether public or private, in response to the problems identified in the 1998 inspection report. I have concluded that the PUC commissioners should have required the PUC operators to respond properly to the issues raised in the 1998 MOE inspection report. One possible response was to engage an alternative operator, such as the Ontario Clean Water Agency (OCWA). However, there were several ways of addressing the issues, and it is too remote to conclude that the commissioners should be faulted for not engaging an alternative operator, or that any provincial government program prevented them from doing so.

The issue of the private sector’s involvement in drinking water has been extensively canvassed in Part 2 of the Inquiry, and I will address this issue in the Part 2 report.

12.8 Ontario Ministry of Agriculture, Food and Rural Affairs Programs

Manure is a source of nutrients for crops. The amount of nutrients available from a manure application can be analyzed to ensure that crops receive neither too many nor too few nutrients. Fertilizer applications can be adjusted to

complement the application of manure. For this reason, manure application is part of the “nutrient management planning” process.

The Resource Management Branch of the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) works in three areas: environmental planning, which includes the development of best management practices; engineering, which includes third-party reviews of nutrient management plans; and land use planning, which deals with provincial policy statements on agriculture. In recent years, OMAFRA’s overall objectives have remained constant, but the way in which they are achieved has changed. Since 1995, the ministry’s focus has been on core businesses and on working in partnerships with other ministries. OMAFRA’s staff strength decreased from 2,400 full-time equivalents in 1990 to 613 full-time equivalents in 2000 – a substantial decrease, even when new partnerships and alternative service delivery are taken into account. In 1990, OMAFRA had 50 county offices and five colleges. By May 2000, it did not have any field offices but did have 13 resource centres across Ontario. In Walkerton, OMAFRA’s staff decreased from ten people in the years 1990–95 to one person by fiscal year 2000–01. The move from field offices to resource centres reflects the change from a focus on individual farmers to a focus on providing more specialized expertise in specific priority areas.

12.8.1 The Ministry’s Role in Groundwater Protection

Two OMAFRA representatives sit on the Ontario Farm Environmental Coalition’s water quality working group.² At the time of the Walkerton hearings, the working group had not developed an integrated provincial groundwater strategy.

Through the 1990s, OMAFRA was aware of the bacterial threat posed by manure spreading practices to surface water and groundwater. In 1992, for example, it knew that 34% of Ontario’s private wells exceeded standards for coliform bacteria, that there was a higher incidence around livestock operations, and that well maintenance and poor septic systems were issues of concern. OMAFRA’s response was to disseminate information so that the risks were well understood. The Ministry focussed on environmental farm plans, nutrient management plans, and other Best Management Practices approaches.

² The Ontario Farm Environmental Coalition is a multi-stakeholder group with members from various disciplines. OMAFRA provides support and technical assistance to its working groups.

Throughout the 1990s, OMAFRA's approach to environmental protection was to develop technical guidance documents by building consensus with stakeholders. The Ministry did not develop legislation, regulations, or even official policies aimed at environmental protection during that period.

12.8.2 Environmental Farm Plans

Voluntary environmental farm plans provide a process for farmers to carry out a risk assessment on their own farms. Each farmer voluntarily attends a workshop where the farmer answers questions related to soils, water, and activities that may introduce contamination into the environment. Such activities include pesticide use; petroleum storage; and manure storage, use and management. Participants develop action plans that establish ratings based on factors such as the distance between pesticide storage or manure application, and the farm's domestic well or a nearby stream. A poor rating on an environmental farm plan requires some immediate action. A fair rating means that the farm operation has met the minimum provincial standard but an action plan is still required to improve the rating to a good or best rating. The environmental farm plans do not consider factors such as subsurface geology and aquifer sensitivity. Approximately 50% of the agricultural land base in Ontario is covered by environmental farm plans. As of April 30, 2000, 20–21% of the Bruce County farms had been represented at environmental farm plan workshops.

12.8.3 Nutrient Management Plans

Voluntary nutrient management planning has three components: minimum distance separation for new or expanding livestock facilities from existing or approved development (MDS II), manure storage capacity, and nutrient management plans. A nutrient management plan analyzes the source of nutrients, the quantity of nutrients being put on the land, and the rate of uptake of nutrients by crops. Randy Jackiw, the Director of the Resources Management Branch of OMAFRA, conceded that nutrient management planning currently places primary emphasis on the uptake capacity of crops; the role of pathogens in the environment is only a secondary consideration.

In 1997, OMAFRA initiated the development of a provincial strategy and draft municipal bylaws for nutrient management. The work was done through the Ontario Farm Environmental Coalition's nutrient management working

group. OMAFRA encourages municipalities to adopt minimum distance separation and nutrient management plan bylaws. In addition, it reviews nutrient management plans for new and expanding livestock operations that either exceed 150 “livestock units,”³ or are greater than 50 livestock units and have a density of more than two livestock units per acre (0.4 ha). However, in its role as reviewer, the ministry does not usually perform site inspections.

In November 1998, OMAFRA’s non-binding position statement for nutrient management plans recommended that farms exceeding 150 livestock units, or with greater than 50 livestock units and more than five livestock units per tillable acre (0.4 ha), have nutrient management plans.

12.8.4 Best Management Practices

The Best Management Practices booklets provide practical and affordable voluntary approaches to conserving soil and water resources. OMAFRA was one of a number of public and private sector organizations that prepared the Best Management Practices technical documents. Although the Best Management Practices approach is supported by OMAFRA as technical policy, it is not official policy (i.e., signed off by the minister, approved by Cabinet, or posted on the *Environmental Bill of Rights* registry).

Neither OMAFRA nor the MOE enforced the Best Management Practices. However, Dr. David Biesenthal – who owned the farm near Well 5 from which contaminants entered the Walkerton water system – was essentially in compliance with the Best Management Practices documents. In fact, the Best Management Practices do not address the distance between manure application and municipal wells. They only provide that the distance between manure application and watercourses or domestic wells should be at least 15 metres. At its closest, the manure at the Biesenthal farm was applied at least 85 metres’ distance from Well 5. In that sense, Dr. Biesenthal’s practices surpassed the Best Management Practices.

³ A “livestock unit” is generally equal to one cow or two calves.

12.8.5 The Legislative and Policy Framework

As reviewed in Chapter 13 of this report, animal waste disposed of in accordance with normal farm practices is exempt from certain provisions of the *Environmental Protection Act*. The 1998 *Farming and Food Production Protection Act* defines normal farm practice to be “a practice that ... is conducted in a manner consistent with proper and acceptable customs and standards as established and followed by similar agricultural operations under similar circumstances.” That Act also prohibits municipal bylaws from restricting a normal farm practice carried on as part of an agricultural operation. The risk created by this legislation is that a municipal bylaw passed to establish a wellhead protection zone can be ineffective against the practice of spreading manure if the practice is deemed a normal practice by the Normal Farm Practices Protection Board.

By July 2000, it became clear that a shift from voluntary to mandatory practices was necessary and that nutrients had to be addressed in a comprehensive manner. An August 2000 assessment of several ministries’ (including OMAFRA’s) water management responsibilities and initiatives identified the need for greater knowledge about water- and environment-related issues, for better-coordinated monitoring, and for relevant provincial legislation and regulations. At the time of writing this report, Bill 81, the *Nutrient Management Act 2001*, had received first reading. The Bill would provide for regulations governing items such as minimum distance separation.

12.8.6 Conclusion

In my view, the government’s policies or lack of policies or programs relating to agricultural activities cannot reasonably be said to have been a cause of the events of May 2000. It is speculative to draw a connection between what regulations the government may or should have enacted, and the ways in which such regulations would have applied to Dr. Biesenthal’s farm or other farms from which bacteria may have originated. Moreover, I note that the manure spreading practices on Dr. Biesenthal’s farm conformed to the non-binding Best Management Practices guidelines. It is far from clear that newly enacted regulations would have affected the manure spreading practices of that farm. I will be making recommendations in the Part 2 report of the Inquiry that address this sensitive and important area of agricultural operations as they relate to the safety of drinking water.

12.9 The Groundwater Management Strategy

Evidence at the Inquiry showed that the Province of Ontario lacks a groundwater management strategy – despite repeated calls for such a strategy from independent parties such as the Environmental Commissioner and the Provincial Auditor. A groundwater management strategy should provide a full understanding of the water being removed from and added to the groundwater system. It should also provide an understanding of the effects of contaminants.

A comprehensive, coherent strategy to protect and manage groundwater seems fundamental in a province that relies extensively on groundwater as a source of drinking water. However, despite this shortcoming, the evidence falls short of establishing that the lack of a strategy had an effect on what occurred in Walkerton in May 2000. It is not clear what would have been included in a groundwater strategy, how it would have applied to the areas around Walkerton, how it would have affected existing uses such as the Biesenthal farm, and how it would have interacted with other government programs like the Best Management Practices described above. In addition, had the province established a groundwater management strategy, it would have taken some time to assess specific situations such as the catchment area for the aquifer that supplied Well 5. Whether such a program, if implemented, would have led the MOE to address the vulnerability of Well 5 before May 2000 is speculative. In any event, I conclude above that even without a groundwater management strategy, the MOE should have been alerted to the vulnerability of Well 5 through its approvals and inspection programs. Further, it should have taken the appropriate steps to require the installation of continuous chlorine residual and turbidity monitors.

My conclusion that the lack of a groundwater management strategy was not shown to have had an effect on the events in Walkerton, however, should not be interpreted as indicating that such a strategy is not important. On the contrary, it is essential.

I heard a great deal of evidence about the lack of a groundwater strategy. Because of the importance of this issue to the safety of drinking water, it is useful to summarize that evidence here to lend support to the recommendations I will be making with regard to source protection in the Part 2 report of this Inquiry.

Dr. Ken Howard testified:

Most parts of the world which use groundwater extensively manage the water; in Ontario unfortunately we don't manage water, the degree of management extends simply to issuing permits to take water and to me issuing permits to take water is a little bit like me writing cheques on my bank account when I don't know how much money is coming in every month and how much is going out to pay ... the other bills ... [T]here's a big difference between issuing permits to take water and managing a resource and to manage a resource you really need to know how the system is working. There's absolutely no reason at all why we can't get to that stage, but I think we are a little bit behind the game certainly in Ontario.

Dr. Howard explained that Permits to Take Water are issued without any prior adequate measurement of either the depletion of the resource that would result from permit use or the amount of water in the aquifer.

Other evidence established that Ontario does not have a province-wide groundwater management strategy as described by Dr. Howard. It was suggested by another witness that budget cutbacks prevented the development of a groundwater strategy.

The Environmental Commissioner of Ontario has brought this and other groundwater protection concerns to the attention of the Ontario government in five consecutive annual reports released since 1996. The commissioner was prompted to investigate provincial management of groundwater after it received 13 applications requesting a more comprehensive, preventive approach to groundwater protection. The commissioner's first annual report, dated 1994–95 and released in June 1996, criticized the Ontario government for reducing the budgets of the Ministry of Environment and the Ministry of Natural Resources – the two ministries likely to take on primary responsibility for groundwater management. The government was also criticized for reducing provincial funding to conservation authorities across Ontario by 70% and restricting their mandate to flood control. The commissioner recommended that Ontario's groundwater management framework be upgraded through the participation and cooperation of the MOE, Ministry of Natural Resources,

Ministry of Consumer and Commercial Relations,⁴ OMAFRA, and the Ministry of Transportation.

The MOE committed itself to develop a plan to protect Ontario's groundwater as part of its 1996 business plan. Later that year it announced that it would lead a review of groundwater management.

In the Environmental Commissioner's 1996 annual report, the commissioner again urged the government to prioritize the development of a sustainable strategy for restoring, protecting, and conserving Ontario's groundwater. The report recommended 11 elements for a comprehensive groundwater strategy.

In the 1997 annual report, the Environmental Commissioner recommended that the government make public its progress on developing a groundwater strategy and specify a completion date. The commissioner criticized the MOE for its incomplete understanding of hydrogeology as well as for its incomplete understanding of potential impacts, including the cumulative impacts, of water-taking. This criticism was echoed in the concerns raised by Dr. Ken Howard at the Inquiry.

In the 1998 annual report, the Environmental Commissioner observed that the MOE had failed to make public its progress toward a groundwater management strategy. The MOE response was to enumerate a list of water-related initiatives. The commissioner observed that the initiatives did not constitute a comprehensive groundwater management strategy.

In the 1999–2000 annual report, the Environmental Commissioner concluded that the current legal and policy framework for groundwater management was fragmented and uncoordinated. The commissioner predicted growing risks if the ministries failed to develop a groundwater management strategy. These risks included conflicts over groundwater in rural Ontario and in urban areas that rely on groundwater for municipal and industrial purposes. The commissioner again recommended that ministries develop and implement a groundwater management strategy in a timely manner in consultation with key stakeholders and the public.

⁴ The Ministry of Consumer and Commercial Relations is now known as the Ministry of Consumer and Business Services.

The Provincial Auditor also urged the MOE to develop a groundwater strategy. The Provincial Auditor's 1996 annual report recommended the systematic monitoring of groundwater quality to safeguard the environment and human health.

In response to the findings outlined in the 1996 report, the MOE stated that such efforts were underway. In the 1998 follow-up report, the Provincial Auditor repeated both his recommendation of 1996 and the MOE response to that recommendation. He concluded: "As of June 1998, a groundwater strategy had yet to be finalized."

I will be making extensive recommendations about the protection of drinking water sources in the Part 2 report of this Inquiry.

12.10 Employee Morale in the Ministry of the Environment

Many witnesses testified that MOE employees are dedicated, conscientious, and loyal. Their concern for the environment and public health was unquestioned. Compared to other members of the Ontario Public Service, they tend to be less likely to move to another ministry. However, the significant reductions in resources and staff had an inevitable impact upon the remaining staff in the MOE. James Merritt and Robert Shaw testified that in 1997, the morale in the MOE was low because of the cutbacks.

Before the 1996–97 budget cuts, a number of cost-cutting measures were implemented by the provincial government. One such measure was the Factor 80 program, under which staff were eligible to take early retirement. Programs like this one were designed to encourage employees to leave the MOE. Andre Castel and Robert Shaw testified that such programs resulted in removing a number of individuals with significant experience at an earlier time than was normal. A significant loss of experience and "collective memory" resulted. Philip Bye testified that the MOE's Owen Sound office suffered from this loss of experience.

The layoffs in 1996 and 1997 caused employees to be concerned for their colleagues and for their own job security because there were no guarantees against further layoffs. The remaining staff were preoccupied with reacting to daily crises and complaints rather than with taking a preventive approach to environmental protection. Work planning tools, such as the Delivery Strategies,

were developed to assist employees in prioritizing their work in times of reduced resources. However, as occurs in any workplace experiencing significant change and cutbacks, morale was low. Low morale emerged as an issue in the 1997 province-wide Operations Division exercise called “Planning Our Future Together.” Local workshops were conducted across the province to obtain feedback in order to assist the MOE in planning for the future in a period of significant change.

The workshops indicated that the cutbacks had, predictably, led to feelings of frustration and anxiety. Employees were given the opportunity to suggest directions in which the MOE should go in this period of restraint. One concern expressed was the loss of technical expertise and assistance for the field staff, which led to a breakdown in the networks that employees had relied on in the past. The result was that employees found it difficult to access information. Another opinion expressed was that environmental officers should not be involved in the inspections of municipal operations because of the MOE’s limited resources. In the MOE employees’ view, the onus should be on the municipalities. In general, the workshops demonstrated a concern with heavy workloads, tight deadlines, reduced staff, and feelings of uncertainty.

I accept that morale was lowered as a result of budget and staff reductions, but I am not satisfied that low morale of MOE staff played a part in any of the MOE failures I have identified above. There was no evidence indicating that any of the MOE staff involved with Walkerton did or did not do anything because of low morale.

12.11 Land Use Planning

12.11.1 General

The Inquiry heard evidence about provincial land use policies and their relationship to municipal bylaws. The evidence raised concerns about a lack of connection between the planning process and issues relating to water-taking and the protection of drinking water. However, I do not think that the policies can reasonably be said to have had an impact on the events in Walkerton.

The primary source of the contamination was the Biesenthal farm which, prior to the amalgamation of Brockton in 1999, was outside the municipal boundary of Walkerton. Moreover, the Biesenthal farm had been in operation for

years. There was no suggestion that either Walkerton or Brockton considered land use measures for any of the farms in the area of Well 5. I do not see a connection between provincial land use policies and the events in May 2000.

I heard considerable evidence about the land use planning process, and I will be making extensive recommendations in the Part 2 report of this Inquiry about land use and the protection of water sources. I will briefly summarize the evidence I heard here but will leave all of my recommendations to the Part 2 report.

12.11.2 The Provincial Role

The provincial government's role in land use planning is to develop and maintain a legislative framework through, for example, the *Planning Act* and the *Municipal Act*. The Ministry of Municipal Affairs and Housing, the lead ministry administering this legislation, issues provincial policy statements, promotes provincial interests, and advises municipalities. The Province administers and approves local planning controls. The Ministry of Municipal Affairs and Housing does receive input from six partner ministries, including OMAFRA, the MOE, and the Ministry of Natural Resources.

12.11.3 The *Planning Act*

The *Planning Act* generally requires municipalities to have official plans, which "shall have regard to" the 1996 Provincial Policy Statements. It requires Bruce County to have a plan. Municipalities not designated by the *Planning Act* have the discretion to decide whether or not to make a plan. The approval authority oversees the official plans' degree of regard to the Provincial Policy Statements. Once an official plan is in effect, all public works and bylaws must conform to it.

Recent amendments to the *Planning Act* limit the MOE's role in planning policy issues such as groundwater and surface water protection. Since provincial approval is no longer required for certain types of planning decisions, MOE expertise is not often called upon during the planning process.

12.11.4 Relevant Provincial Policy Statements

The Provincial Policy Statements make no reference to drinking water, and they protect normal farm practices in prime agricultural areas (of which Walkerton is not one). I reproduce here the Provincial Policy Statements related to land use and groundwater protection:

PPS 1.1.1(e): A coordinated approach should be achieved when dealing with issues which cross municipal boundaries, including: 1. infrastructure and ... 2. ecosystem and watershed related issues; ...

PPS 1.1.1(f): Development and land use patterns which may cause environmental or public health and safety concerns will be avoided ...

PPS 2.4.1: The *quality and quantity* of groundwater and surface water and the function of sensitive groundwater recharge/discharge areas, aquifers and headwaters will be protected or enhanced.

12.11.5 The Approval of Official Plans

The approval authority works with municipalities while they are developing their official plans and considers whether the plans “have regard to” the above Provincial Policy Statements. The Ministry of Municipal Affairs and Housing is the approval authority for official plans, unless the municipality is exempted under the *Planning Act*. Since 1996, many of the approval functions of the minister under the *Planning Act* have devolved to the municipalities by delegation or exemption. The approval authority for a local municipality may now be an upper-tier municipality such as a regional municipality council, a county council, or the Ministry of Municipal Affairs and Housing.

Once a municipality has adopted its official plan, the plan comes before the approval authority for review and approval. The approval authority can raise an issue, issue a notice of decision to modify and approve a plan, or issue a notice of its decision to refuse the plan. A plan can be refused on the basis that it does not have sufficient regard to the Provincial Policy Statements. If the plan is refused, the municipality can appeal to the Ontario Municipal Board. The Ministry of Municipal Affairs and Housing is the only provincial ministry that can initiate an appeal of a municipal planning decision to the Ontario

Municipal Board. The focus of an appeal is usually on official plans and amendments, rather than on site-specific matters.

If the MOE is concerned that a particular official plan or bylaw may have an impact on surface water or groundwater, it cannot act on its own; it must persuade the Ministry of Municipal Affairs and Housing to bring the matter before the Ontario Municipal Board. At the time of the Inquiry, the Ministry of Municipal Affairs and Housing had received only one authorized request from the MOE to launch an appeal – and that request was granted.

12.11.6 The Role of Municipalities

Municipalities can take some action if they wish to restrict activities near wells or to protect groundwater from contamination. They can purchase land in the area, expropriate the land, or pass zoning bylaws within municipal boundaries. They can also arrange a land swap, a conservation easement, or a land trust. The Ministry of Municipal Affairs and Housing does not provide municipalities with any information explaining these options.

12.11.7 Bruce County's Official Plan

The Bruce County official plan is the plan applicable to the Municipality of Brockton. The former Town of Walkerton has its own official plan for the local municipality, but it must comply with the county's plan for the upper-tier municipality. The Ministry of Municipal Affairs and Housing is the approval authority for the county's plan and any amendments to it.

Several sections in the Bruce County official plan were identified by the Ministry of Municipal Affairs and Housing as “having regard to” the Provincial Policy Statements protecting water quality and quantity. I will summarize them here.

The county's plan states that it has a general environmental policy goal to protect and enhance air, land, and water quality. Further environmental objectives include promoting environmentally sound watercourse management, encouraging the preparation of watershed plans, protecting groundwater and surface water quality, protecting headwater areas of rivers and streams, and discouraging land uses and activities that are noxious and that may contribute

to air, water, or land pollution. The plan specifically states Bruce County's intention to protect headwater areas, groundwater recharge areas, and aquifers as a means of protecting groundwater and surface water from degradation.

The Bruce County plan notes, however, that the Province of Ontario did not provide for the mapping of these important geographical features. The plan encourages the preparation of watershed studies when a major development is proposed and encourages the incorporation of the results into county and/or municipal official plans. It also states Bruce County's intention to protect water quality and natural habitats that depend on water bodies for their existence. It goes as far as saying that not only should local plans implement surface water management policies, but surface water management plans "shall be required" for some forms of new development.

12.11.8 Conclusion

The Provincial Policy Statements regarding water quality are not binding, and the MOE has little input into municipal land use planning. A provincial groundwater strategy, including information such as mapped aquifers, mapped water tables, and a well water database, would significantly enhance municipalities' ability to develop official plans that reflect provincial interests in water quality and quantity. The Ministry of Municipal Affairs and Housing does not have any policies or guidelines specifically relating to the siting of wells, aquifer protection, or the protection of recharge areas, and the MOE's role in this area has been greatly reduced. I will address all of these issues in depth in the Part 2 report of this Inquiry.

