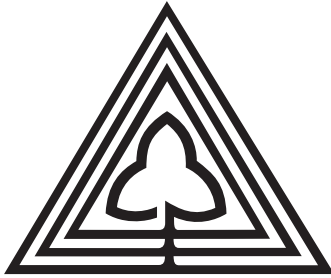


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The Challenge of the O'Connor Report:

Permanent Solutions for a New MOE

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Foreword

Workers in the public service, and others who are committed to rebuilding the Ministry of the Environment (MOE) and the Ontario Clean Water Agency (OCWA), welcome the findings of Mr. Justice Dennis O'Connor. We are now eager to participate in the implementation of his recommendations to create a permanent plan to protect our environment and human health.

Since the late summer of 1995, and throughout the Walkerton Inquiry, workers in the Ontario Public Service have raised concerns and put forward new ideas for rebuilding the MOE and OCWA. Many MOE and OCWA staff, with support from their union, testified before Mr. Justice O'Connor and contributed important insights about Ontario's drinking water regime. OPSEU's legal and research teams submitted 10 documents based on the expertise and knowledge of MOE and OCWA staff. We are pleased to see these ideas and concerns reflected in Mr. Justice O'Connor's findings and recommendations.

We worked to inform the Inquiry's findings and recommendations. Now we must work for their thorough, proper and permanent implementation.

Mr. Justice O'Connor has made 28 recommendations for a safe, permanent water regime for Ontarians. The government of Ontario has responded to these recommendations individually, with brief answers indicating a commitment to ensure that all recommendations are implemented.

Staff know that Ontario's Cabinet Ministers have not become converts to the Ministry's cause. Nor has there been appropriate leadership from within the Ministry. Management Board and MOE Senior Managers continue to make decisions contradictory to Mr. Justice O'Connor's recommendations.

In his report the Justice is clear that significant additional and permanent resources and increased training are essential to the success of the MOE in assuring water quality. Yet new resources contributed since the Walkerton tragedy have been insufficient and temporary while training initiatives are being resisted. We fear that once attention on the Ministry is diverted, even the slim temporary resources for labs, approvals, training and inspections given during the crisis will melt away.

Some data and information within this document are not footnoted as would be normal OPSEU practice. This alteration to our practice is due to our need to protect individuals with municipal government, MOE and environmental groups who are aware of the contradictions in MOE policy but do not want to be identified. Those seeking further confirmation regarding unfootnoted information should contact OPSEU's Research Unit.

OPSEU will continue to research, communicate, participate, support, urge, help and admonish – whatever is necessary – to ensure that the work of the Inquiry is implemented as a permanent and trusted solution, bringing pure drinking water to all Ontarians.

Sincerely,

Leah Casselman
President
Ontario Public Service Employees Union

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Executive Summary

In his report, Part I, Mr. Justice O'Connor has made 28 recommendations for rebuilding the programs that secure the quality of our drinking water. Many of these recommendations are directed to provincial government organizations.

With respect to OCWA and the MOE, Mr. Justice O'Connor has directed the government to:

- Enact a policy of annual, thorough and full inspections of all water treatment plants;
- Immediately review all Certificates of Approval, insert all necessary conditions and henceforth review regularly;
- Increase training for water treatment plant operators, MOE Environmental Officers and MOE technical and scientific staff; and
- Establish an information management system to enhance access to all relevant documents, tests and reports.

From their vantage point within the water regulating system, staff of the Ministry of Environment (MOE) and the Ontario Clean Water Agency (OCWA) have a special understanding of the actions required to implement Mr. Justice O'Connor's recommendations. Staff raise three general concerns regarding the government's response to the Walkerton tragedy thus far.

- The responses implemented thus far are insufficiently and temporarily resourced;
- Management Board and Senior Management are resisting recommendations to increase occupation-related technical training; and
- There are fears the information management project will not be finished on schedule.

This brief describes the systems, relationships and resource levels with the MOE and OCWA and identifies specific actions that staff believe are essential to the full and proper implementation of the Part 1 recommendations. The specific actions are summarized below as a checklist:

1. The public must be shown that the total hours and dollars directed to public drinking water inspection has been doubled from 1994/95 levels with no reduction in hours and dollars for other programs. We believe that this will require hiring an additional 40 permanent and full-time Environmental Officers.
2. Temporary Environmental Officer positions must be converted to permanent.
3. The MOE must publicly produce program-based workplan allocations for Technical Support Section staff showing significant growth in hours and dollars for communal water without reductions for other programs
4. The role of the Standards Development Branch in assisting municipalities in reducing costs by optimizing existing equipment needs to be confirmed and communicated to waterworks.

5. Workplans for the Standards Development Branch need to be made public and must show increased allocations of time for investigating new technologies and assisting municipalities with optimization efforts.
6. The MOE must set out an annual public "innovation plan" linked to the development of new methodologies for emerging water-borne pathogens and issue an outcome-based annual report on the plan each year
7. Management Board must remove external FTE constraints on the Laboratory Services Branch and allow the Branch to allocate resources based on sound scientific policy
8. A review of the Approvals Branch resources required to manage increased Certificate of Approval workload must be undertaken and must be made public.
9. Current temporary staff of the Approvals Branch and additional staff indicated by the public report must be made permanent.
10. The planned transfer of the Permit To Take Water program to the Approvals Branch must be stayed until the resources implications of the transfer have been made public and permanent additional resources have been secured.
11. MOE must integrate policy and revoke all directions prohibiting the passage of pertinent information between approvals, inspection and enforcement programs.
12. The mandate of the Provincial Water Protection Fund must be amended and made permanent
13. Current OSTAR and all future water capital grants should be issued through PWPF based on sound scientific and technical review, not SuperBuild.
14. Management Board must allocate at least five job-related training days per years for each MOE position
15. A total budget equivalent to 8% of wages and salaries should be committed to MOE staff training
16. Career training plans must be created for each Ministry occupation
17. On-the-job training must be enhanced by converting temporary staff to permanent status
18. The Memorandum of Agreement with OCWA should be amended to ensure delivery of a new MOE curriculum and to ensure access to its delivery for municipal waterworks operators.
19. Only accredited water operator courses must be recognized through any amendment to O. Reg. 435/93.
20. Rebates should be payable to waterworks operating organizations for all fees paid for accredited learning.
21. Demonstration of skill examinations must be developed to remove biases from the certification process

22. The IDS project's critical path must be made public and reports on progress should be made public on at least a bi-monthly basis.
23. Management Board must be prepared to add financial resources and internal expertise in case of lapses in the critical path.

The Events of May, 2000

Heavy rainfall had come down on Walkerton for five straight days. The ground was already muddy and soaked when a powerful, three-inch torrent hit the ground on the night of Friday, May 12.

A few weeks before, a local farmer had spread over 70 tons of manure across his fields – some of it only 81 metres from the head of Walkerton's well number 5. The waterlogged soil carried millions of *E. Coli* and *Campylobacter jejuni* bacteria down into the town's raw water supply.

The bacteria should have been destroyed by chlorine before being drawn into the water systems. But the water was insufficiently chlorinated and the bacteria flowed through the distribution system to the taps, hoses and fountains of the town.

On Monday, May 15, as part of routine testing, water samples were tested by an external laboratory service. The next morning, May 16, the waterworks employees were told that the water had tested positive for *E. Coli*. There is no test for the *Campylobacter jejuni* bacteria.

Neither the waterworks employees nor the laboratory told anyone; people kept drinking the water. Finally, on Sunday, May 21, the local Medical Officer of Health, based on information from a local hospital laboratory warned the citizens of Walkerton to boil their water. In all, seven people died and 2,321 people became ill in the town of 4,800.

Findings of the Inquiry and OPSEU's Role in the Recommendations

The Inquiry that followed found that the town's water system operators had, for many years, failed to properly chlorinate the water, and, on virtually a daily basis, falsely recorded the level of residual chlorine in the water. They were also out of compliance with regulations requiring continuous monitoring of the residual chlorine levels in the water coming from well 5, although they probably didn't know it.

At the Inquiry, the government argued that the sole cause of the tragedy was the failings and falsifications of the waterworks managers. Mr. Justice O'Connor writes: "I reject that argument completely."¹

In addition to the evident culpability of the Walkerton waterworks managers, the Inquiry into the Walkerton Tragedy found that:

- "The failure to use continuous monitors resulted from shortcomings in the approvals and inspections programs of the Ministry of the Environment (MOE). Had the MOE programs

¹ *Report of the Walkerton Inquiry, Part 1*, p.268.

operated properly, there would not have been an outbreak and the seven deaths and thousands of illness would not have happened.”²

- “The MOE’s inspection program should have detected...[and] corrected” the improper monitoring practices at the Walkerton waterworks.³ “The scope of the outbreak would very likely have been substantially reduced” if the MOE had detected these improper practices, as they should have.⁴
- Sharp cuts to the MOE budget “made it less likely that the MOE would have identified both the need for continuous monitors...and the improper operating practices.”⁵
- Budget cuts also caused the privatization of public laboratory services, ending the requirement to notify both the MOE and the local Medical Officer of Health, and delaying the boil water advisory by two to three days, leading to hundreds of additional illnesses and perhaps one death.⁶

Due to the failings of government, Mr. Justice O'Connor has directed several recommendations to government organizations. This brief focuses its attention to the findings and recommendations material to the organizations of the provincial government because of our specialized area knowledge.

Rebuilding the System – Permanently

Mr. Justice O'Connor makes several recommendations regarding the need to establish a permanently resourced and properly structured drinking water inspection and approvals regime.

However, Ministry staff continue to be concerned that insufficient and temporary resources are being contributed to the water approvals, inspection and scientific programs. There are also concerns that there has been an inappropriate politicization of the administration of grants to municipal waterworks. These weaknesses need to be corrected if the Inquiry’s recommendations are to be implemented effectively.

The Inspection Program

Mr. Justice O'Connor found deep failings in the inspection program of the MOE and the resources it received. In recommendation 15, Mr. Justice O'Connor states that, “as a matter of policy,” water treatment facilities should be inspected annually. In recommendation 17, he directs the Ministry to ensure that adequate resources are provided for “thorough and effective” inspections.

In the early 1990s, the MOE had a policy of inspecting water treatment plants every two years. However, the massive cuts to the Ministry between 1995 and 1998 caused a diversion of resources from pro-active work to reactive work. By 1998, “the MOE considered inspections of water treatment plants to be optional”⁷ and resources were diverted to fill the large holes created in the MOE’s resources for emergencies, spills, and chronic polluters.

² *Report of the Walkerton Inquiry, Part 1*, p. 3.

³ *Ibid.*, p. 4.

⁴ *Ibid.*

⁵ *Ibid.*, p. 5.

⁶ *Ibid.*, p. 4

⁷ *Ibid.*, p. 314

The last inspection of the Walkerton waterworks prior to the tragedy was in February, 1998. Water samples taken then showed that the water was below the level of residual chlorine required and that the regulatory minimum sampling requirements were not being met. A letter was sent to the waterworks managers threatening to issue an Order to comply. However, despite the recognized deficiencies at the Walkerton waterworks and the Ministry's threats, there was no follow-up inspection.

Whereas 10.17 per cent of the time of the employees in the Owen Sound District Office was spent on communal water issues in 1994/95, only 5.12 per cent of the new, smaller amount of total time was spent on communal water in 1999/2000.⁸ The number of water facility inspections from the Owen Sound office had been 16 in 1995/96 but only 10 were carried out in 1999/2000.⁹ Walkerton was not one of them.

In his report, Mr. Justice O'Connor notes that "after the budget reductions, the resulting refocusing of program priorities made it less likely that a follow-up inspection would occur."¹⁰

Mr. Justice O'Connor writes: "I am satisfied that a follow-up inspection, particularly if unannounced, should have discovered the unacceptable treatment and monitoring practices"¹¹ such as the false log entries, and unacceptable residual chlorine levels. This, in turn, would have either pre-empted the outbreak or greatly limited its scope.

The Ministry's municipal water facilities inspection program is carried out by the MOE's Environmental Officers reporting to Regional Offices. These Officers are the front-line resource for a total of 15 Ministry programs.

Immediately after the Walkerton crisis, 25 new Environmental Officers were hired and significant resources were diverted from other environmental inspection programs in order to resurrect the water treatment plant inspection program. These new and diverted resources allowed the MOE to complete an inspection of all facilities during 2000/01.

However, the municipal water treatment plant inspection program cannot be maintained at this level of inspection without continuing to divert resources from the other 14 programs. These other activities include inspection or abatement of: industrial sites emitting ozone-depleting chemicals, biosolid waste sites, hazardous waste disposal sites, PCB facilities, municipal solid-waste disposal sites (landfill, transfer and processing), private water treatment plants, private communal subsurface sewage systems, communal municipal sewage plants, Environmental Assessment reviews, restoration of contaminated sites, private water surveys, industrial air dischargers, industrial wastewater dischargers and septage storage and waste hauling.

So-called "strategic priority shifts" that rotate the diversion of resources to the crisis of the day and which are caused by insufficient resources and a reactive stance pose a strong risk to human health and the environment.

The recent hirings bring the total number of Environmental Officers to 425. However, the Ministry is still far below the resource levels prior to the cuts of 1996. On December 31, 1994, the MOE employed 472 Environmental Officers, 11 per cent more than today.¹² And even at this higher staff complement in 1994, the MOE was only able to enact a policy of bi-annual inspection, not the annual inspection recommended by Mr. Justice O'Connor.

⁸ *Report of the Walkerton Inquiry, Part I*, p. 319

⁹ *Ibid.*

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² Management Board Strip Report, December 31, 1994

The MOE and Management Board must commit to adequately resourcing annual water plant inspections without diverting resources from other areas of environmental protection. The best measure of such a commitment can be taken through Ministry workplans. The MOE measures program resourcing by allocating work time and salaries of employees toward one of the 15 environmental programs. To ensure that annual inspection of public communal water systems becomes entrenched as a permanent program of the MOE, these numbers need to be monitored.

- 1. The public must be shown that the total hours and dollars directed to public drinking water inspection has been doubled from 1994/95 levels with no reduction in hours and dollars for other programs. We believe that this will require hiring an additional 40 permanent and full-time Environmental Officers.**

Although Mr. Justice O'Connor has recommended that annual inspections be instituted as a permanent program of the Ministry, 99 of the 425 Environmental Officers are temporary.¹³ This represents almost 25 per cent of the Environmental Officers.

This use of temporary solutions has no historical precedent. For example, of the 472 Environment Officers with the Ministry on December 31, 1994, the year prior to the change of government, only 27, or 6 per cent, were in temporary positions.¹⁴

Among the staff assigned solely to water inspection, the percentage is even higher. Since the Walkerton crisis, 29 new workers have joined the Ministry as an Environmental Officer. These workers have generally been assigned to water responsibilities. Of these, 26 are temporary.¹⁵

Management Board is a committee of Cabinet Ministers with oversight of staff allocations to all Ministries and Ontario Public Service agencies. Temporary staffing allocations from Management Board are made for a set term and approval from Management Board is required to renew these allocations.

The temporary commitment from Management Board belies the assertion that the government is committed to a permanent policy of annual water facilities inspection and raises the fear that Management Board will not renew staff complements once public attention turns to other matters.

- 2. Temporary Environmental Officer positions must be converted to permanent.**

Regional Technical Capacity

Full and thorough inspections by Environmental Officers cannot proceed without the assistance of technical and scientific support.

In particular, an effective inspection requires knowledge of the challenges presented by differing hydrogeologic features and water issues. Given the increased concern regarding the influence of surface water on ground water, the need for this expertise is evident. This expertise resides within the staff of the Water Resources Units (WRU) attached to each of the five Regional Offices.

¹³ CORPAY data, January 14, 2002

¹⁴ Management Board Strip Report, December 31, 1994

¹⁵ CORPAY data, January 14, 2002

Regional WRU staff have responsibilities for various programs. In order to support a higher water facilities inspection standard, their time has been diverted from other programs. Among other impacts, the diversion has had a measurable impact on applications for the Permit To Take Water Program, a program that has now developed a lengthy backlog.

In order to take more than 50,000 litres of water per day, a Permit To Take Water (PTTW) must be obtained. WRU staff review new PTTW applications. A recent memo from the Director of the Eastern Region confirms that there is a "substantial backlog of Permits in process due mainly to workload volume and priority pressures".¹⁶ The memo calls for a new diversion of resources by "identifying Health and legal priorities and understanding that all other priorities will temporarily be put on hold."

As has become the standard response to high workloads, in addition to diverting resources, the MOE is adding temporary hydrogeologists to Regional WRUs.

The capacity of the Technical Support Sections has been reduced by 43 per cent since 1996 in tandem with the move toward less frequent and more cursory inspections of water plants, hazardous waste sites and other environment challenges. On December 31, 1994, Technical Support Sections employed 188 scientists and technicians. Management Board has reduced the allocation of Full Time Employees (FTEs) for Technical Support Sections to 108 in 2000/01.

The Ministry cannot possibly undertake full and effective annual plant inspections without increasing the technical and scientific staff within the Regional Technical Support Sections.

3. The MOE must publicly produce program-based workplan allocations for Technical Support Section staff showing significant growth in hours and dollars for communal water without reductions for other programs

Standards Development

Mr. Justice' O'Connor's call for full and effective annual inspections also requires the application of specialized knowledge from the Standards Development Branch.

As new technologies are developed for filtering and disinfecting raw water, it is the job of staff from the Standards Development Branch to determine their appropriateness as either mandatory or allowable water treatment processes. Environmental Officers, in turn, must become aware of these new technologies and their limitations. These new technologies may reduce treatment costs or deliver a better product. This pro-active work must be maintained if Ontarians are to receive value for money and high-quality results from their water treatment plants.

In addition, as technical requirements change due to higher quality standards, the advice of the Branch can be helpful to municipal waterworks in ensuring that public money is spent appropriately. In many cases, minor optimization efforts can allow a plant to achieve higher standards, removing the requirement for new equipment purchase. The advice of Standards Branch staff is an important counter-balance to the high sales commissions paid to private consulting engineers upon purchase of new equipment by a municipality.

Like other Branches, Standards Branch resources were deeply cut after 1995. On December 31, 1994 there were 167 employees in the Standards Development Branch and the Science and

¹⁶ E-mail to Regional Managers and Area Supervisors from Regional Director Gary Martin, Feb 11, 2002

Technology Branch. These Branches were combined in the spring of 1997. By March 1998, the Standards Development Branch had a staff strength of 99.

Despite new technologies and standards -- and now the inclusion of a whole new class of water systems through O. Regulation 505/01 -- the resources for the Standards Development Branch have not increased.

- 4. The role of the Standards Development Branch in assisting municipalities in reducing costs by optimizing existing equipment needs to be confirmed and communicated to waterworks.**
- 5. Workplans for the Standards Development Branch need to be made public and must show increased allocations of time for investigating new technologies and assisting municipalities with optimization efforts.**

Laboratory Services Capacity

In recommendation 27, Mr. Justice O'Connor cites the need for Environmental Officers to receive introductory and advanced courses that cover a range of areas, including "emerging pathogen risks." However, it is well known within the MOE that research from the Laboratory Service Branch about emerging pathogens is a low priority.

Pro-active work in several areas, particularly microbiology, has suffered greatly as staff cuts have caused a diversion of resources. In these shifts, the Laboratory Services Branch has become more focused on reactive work that provides important expert evidence for litigation.

The Laboratory Services Branch provides service to many parts of the Ministry. Major internal client groups include the Investigations and Enforcement Branch (IEB) for analytical testing and litigation, Standards Development Branch for new and emerging contaminants and Environmental Monitoring and Reporting Branch for various monitoring programs.

The Standards Development Branch regularly identifies new contaminants and refers their findings to the Laboratory for the development of methodologies for their identification or neutralization. Once such methodologies are developed, the Environmental Monitoring Branch, IEB and Regional Offices begin requesting these methods to support their work.

The Laboratory Services Branch is facing difficulties fully serving these roles due to staff reductions. Management Board has steadfastly refused to increase FTEs despite work over-loads that are requiring Laboratory Services to contract private laboratories. MOE staff have repeatedly asked senior management whether it would be less expensive to pay for additional MOE staff time or to have this work done externally. MOE staff are told that the constraints on Laboratory Branch FTEs and the requirement to contract-out are "political decisions" and that no cost/benefit analysis has been undertaken.

The fragmentation of lab services among several organizations inhibits the integration, standardization and continuity of service. Management Board's decision to limit FTE allocations and force over-load work to external contractors continues the temporary-fix ethic of the current government. This again raises concerns that if concern for the MOE's capability wanes, the government, through Management Board, will again reduce capacity of the Laboratory and other Branches.

Such reductions would come despite the need for proactive development of affordable and reliable tests for the presence of emerging pathogens. While the microbiological pathogen *E. Coli* is well-known, others, such as *Cryptosporidium*, (which has infected water in North Battlefords, Saskatchewan, and North Bay, Ontario) and *Campylobacter jejuni*, which was also present in the Walkerton water and which contributed to two of the Walkerton deaths, are emerging threats. However, unlike *E. Coli*, there is no affordable test for either *Cryptosporidium* or *Campylobacter jejuni*.

Funding for recent initiatives to develop an affordable and reliable test for the presence of *Cryptosporidium* have been denied due to a lack of resources. Thus the ability of the Environmental Officer to identify such emerging threats is limited.

For such innovative work to occur, the public sector needs to once again become pro-active. Most private laboratories do not do such groundbreaking work; they generally remain focused on applying the test methodologies that have been recognized by the MOE. Furthermore, any privately discovered methodologies would be patented, decreasing their availability and increasing their costs to water systems. Public laboratory methodologies become public property.

- 6. The MOE must set out an annual public "innovation plan" linked to the development of new methodologies for emerging water-borne pathogens and issue an outcome-based annual report on the plan each year**
- 7. Management Board must remove external FTE constraints on the Laboratory Services Branch and allow the Branch to allocate resources based on sound scientific policy**

The Approvals Program

Certificates of Approval are issued to municipal drinking water systems upon review of the technologies and processes proposed for construction. Until the mid-1990s, such Certificates were granted in perpetuity.

However, changes to raw water quality or requirements for higher monitoring or testing standards may require new processes. When MOE decided to begin inserting these requirements into Certificates of Approval in the early 1990s, these conditions were only inserted into new Certificates or Certificates under amendment.

If the MOE had reached back to amend all Certificates, the need for continuous chlorine residual monitoring should have been inserted as a condition into the Certificate for Walkerton Well number 5. Such a requirement had been regulated in 1994 and the ground water susceptibility was known. Mr. Justice O'Connor has found that it was unlikely that the Walkerton waterworks managers were aware of the regulatory requirements and, further, that it was unreasonable for them to be expected to be aware of the requirement given the lack of communication from MOE regarding the change.

Inserting the condition might have prompted Walkerton's water managers to install the appropriate equipment since the insertion would have given the condition the force of law. Even had the insertion not prompted action in Walkerton, its inclusion in the Certificate would have made the Environmental Officer aware of the need to inspect for the use of continuous

monitoring. Mr. Justice O'Connor has found that had such equipment been in use, the outbreak would not have happened.¹⁷

Mr. Justice O'Connor, in recommendation 12, directs the Ministry to review all outstanding Certificates of Approval, insert the conditions required by regulation and initiate a program of regular review and updating. The government said that Certificates of Approval are currently being completely reviewed, conditions are being attached and all Certificates will henceforth be reviewed every three years.

However, once again there is evidence that Management Board has not allocated sufficient resources for the review.

The review was announced by the government on August 8, 2000. The government informed waterworks operations that they would be required to be in full compliance with Ontario Drinking Water Regulation (ODWR) 459/00 by December 31, 2002.

The first step in the review was the submission by the municipalities of an engineer's report regarding each waterworks. These reports were to be directed to the Approvals Branch by May, 2001. In these reports, the municipalities were to outline the actions to be taken to come into compliance with the ODWR 459/00.

Next, the staff at the Approvals Branch were to review and approve these reports. All conditions were to be inserted into a new Certificate of Approval and the Certificate was to be issued back to the municipality.

Finally, with the new Certificates (complete with conditions) and reviewed engineering documents in hand, the municipalities were to obtain the financing or grants required to purchase the equipment and have it installed and operational by December 31, 2002.

The government was well aware the resources required for the review of the Certificates would be large. Mr. Justice O'Connor notes that "as the need for a systematic review of existing Certificates of Approval became apparent, staff reductions in the Approvals Branch compromised the branch's ability to conduct that review."¹⁸ Just two months prior to the Walkerton deaths, the Provincial Auditor recommended reviewing the Certificates of Approval and inserting site-specific conditions. In his report, Provincial Auditor Erik Peters, reported that "[t]he Ministry's management advised us that updating existing approvals would involve a significant workload and expense for facility operators and the Ministry."¹⁹ There was no commitment of additional resources until after the Walkerton catastrophe.

Even then, despite the recommendation of Mr. Justice O'Connor, the additional resources given to the Branch consisted of six temporary employees and a number of consultants.²⁰ Changes to staff levels have now brought the Branch's staff complement to 210. Hence, as a result of the need to review all outstanding Certificates, only a 3 per cent staff increase was allocated.

The insufficiency of the resources allocated by Management Board is evidenced in the inability of the Approvals Branch to review and reissue the Certificates of Approval on the timeline originally announced.

¹⁷ *Report of the Walkerton Inquiry, Part I*, p. 297

¹⁸ *Report of the Walkerton Inquiry, Part I*, p. 295

¹⁹ *Special Report: Accountability for Value and Money*, Office of the Provincial Auditor, 2000

²⁰ Assistant Deputy Minister Corporate Management Division, Dana Richardson to Standing Committee on Public Accounts, April 26, 2001, 11:20am

New Certificates of Approval have only recently begun to be issued with completion of the task in February. Because of the time required by municipalities to identify, purchase and install the equipment for full compliance with ODWR 459/00, the Ministry is now considering December 31, 2003, to be the date for full compliance. Thus, where the government had set a 17-month implementation timetable, due to under-resourcing, full implementation will take 29 months.

We recommend the following steps be taken to ensure the Branch is properly rebuilt and conditions properly inserted into Certificates of Approval:

8. A review of the Approvals Branch resources required to manage increased Certificate of Approval workload must be undertaken and must be made public.

Not only have the resources to the Approvals Branch been insufficient, but, once again, the resources given to the Approvals Branch have been temporary. The additional resources given under Operation Clean Water were for a period of only 18 months.²¹ In total, of the 210 employees of the Branch, 65 -- 31 per cent -- are temporary.

The proper functioning of the public service is impeded by the continued application of temporary fixes to structural and resource crises. Such approaches are obvious signs that the government lacks a vision for the work of the Ministry and raises concerns that resources will be withdrawn once the political crisis passes.

9. Current temporary staff of the Approvals Branch and additional staff indicated by the public report must be made permanent.

In April 2002, the Approvals Branch is to take over review of Permits To Take Water (PTTW). We are concerned that, once again, the resources will be temporary and insufficient.

10. The planned transfer of the Permit To Take Water program to the Approvals Branch must be stayed until the resources implications of the transfer have been made public and permanent additional resources have been secured.

The failures of the approvals system is evident in other organizational behaviour that seeks to limit workloads by becoming willfully blind to safety concerns.

An example of this behaviour is found in direction to staff to ignore the drinking water implications of an application for a PTTW. Such directions limit the number of Certificates of Approval received by the Approvals Branch.

PTTW applications are currently reviewed through the Water Resources Units within Regional Offices. These staff are currently directed to ignore statements that a Permit applicant might make indicating that the water will be used as drinking water and which might indicate that a Certificate of Approval is necessary. This is not as it should be in a pro-active, integrated Ministry.

PTTW applicants must be asked about the intended use of the water and, if it is to be used for drinking, applicants must be directed to apply for a Certificate. The Approvals Branch should be advised of the intended use and should take pro-active steps to ensure that the applicant takes the steps required to produce safe water.

²¹ Assistant Deputy Minister Corporate Management Division, Dana Richardson to Standing Committee on Public Accounts, April 26, 2001, 11:20am

This direction is again evidence of the stopgap efforts undertaken to reduce the time required to clear a file. That it is contrary to the mission statement of the Ministry appears to be of little consequence. By directing staff not to raise the requirement for a Certificate the MOE is inviting a charge of regulatory negligence and is making itself willfully blind to human health implications that may result.

11. MOE must integrate policy and revoke all directions prohibiting the passage of pertinent information between approvals, inspection and enforcement programs.

Grants Administration

To support the engineering upgrading required by ODWR 459/00, on August 10, 2000, the government announced \$240 million in funding for sewer and water expenditures.²² Eighteen months later, virtually none of this money has been transferred to municipalities.

210 municipalities have shared about \$3 million from OSTAR to fund mandatory engineering reports.²³ These reports have been submitted to Approvals Branch, reviewed and, upon receipt of a new Certificate of Approval, the municipality will be able to apply to SuperBuild for further OSTAR support to purchase equipment needed for compliance.

However SuperBuild has no technical expertise in engineering, hydrogeology or other areas relevant to water treatment or water plant operations. Nor are the funds being transferred to the municipalities co-funded by the private sector or any other level of government, as is the mandate of SuperBuild. There is no policy reason for water grants to be run through SuperBuild.

SuperBuild is an agency of the Ministry of Finance. The MOE Approvals Branch forwards its technical report, but the Minister of Finance,²⁴ currently Jim Flaherty, makes the final granting decision. Announcement of the award of a grant is made by another Minister, the Minister of Agriculture, Food and Rural Affairs, Brian Coburn.

This separation of announcement, approval and expertise introduces Cabinet table politics and divergent institutional interests into grant awards and the timing of their release. This is not appropriate. Water facilities grants, their timing and their amounts should be technical and engineering decisions adhering to government policy. It is a job for the civil service. Present structures allow for delay and political brokerage in the assignment of grants.

Until the arrival of the SuperBuild fund, staff of the MOE awarded and released grants to water facilities grants through the Municipal Assistance Program. In 1997, these funds were superseded by the Provincial Water Protection Fund (PWPF) -- again a temporary measure -- operated by the Water and Sewage Infrastructure Section in the Environmental Sciences and Standards Division. This Division hosts the Laboratory Services and Environmental Monitoring Branch and possesses the independent and technical mandate required to ensure that decisions regarding support to municipalities are made expeditiously and without political consideration.

12. The mandate of the Provincial Water Protection Fund must be amended and made permanent

²² SuperBuild, "Harris Government Announces Next Steps in Operation Clean Water Including Capital Funding and Long-Term Strategy," August 10, 2000

²³ Associate Deputy Minister, Implementation and Transition Secretariat, Bob Breeze to Estimates Committee, Oct 23, 2001, 4:20pm

²⁴ Minister of Environment, Elizabeth Witmer to Stranding Committee on Estimates, Oct 23, 2001, 4:30pm

13. Current OSTAR and all future water capital grants should be issued through PWWP based on sound scientific and technical review, not SuperBuild.

Improved Training

In the course of the Inquiry, Mr. Justice O'Connor found that the seriousness of the *E. coli* and *C. jejuni* bacteria were not well known nor were there means for identifying the direct influence of surface water. Further, he found that internal MOE reports were citing concerns regarding the ability to attract and retain skilled staff.

Ministry Staff

Mr. Justice O'Connor notes that, within the MOE, a "shift away from technical training, was accompanied by a move toward management and administrative training,"²⁵ and that "the MOE has difficulties attracting and retaining skilled personnel."²⁶

Many of these challenges are outlined in the MOE's own 2000/01 Human Resource plan. Mr. Justice O'Connor recommends that the MOE "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."

Among the findings of the 2000/01 Human Resources report:

- "Loss of institutional memory and key expertise as well as the virtual elimination of a cadre of younger workers."
- "The elimination of both middle-management and entry-level positions."
- "MOE must strengthen its ability to attract, retain and maximize the potential of its workforce."
- "Individuals generally consider their work to be more than 'just a job.' These characteristics are extremely beneficial to the organization, but also represent a special challenge in maintaining a motivated and empowered workforce."
- "The continued demand and increasing competition with other ministries and the private sector for skilled, high-demand employment groups in functional areas including...science and technical professions."
- "Positions with a strong emphasis on science normally require skill sets that, combined with advanced scientific education, require extensive on-the-job experience and knowledge that is only gained through time and investment in learning...the ministry is experiencing challenges in retaining specific skills (e.g.: toxicologists), once the investment in learning and scientific development is made."
- "MOE's ability to address this issue effectively will also be diminished when considering such gaps and the potential wage differentials between government, other public service

²⁵ *Report of the Walkerton Inquiry*, p. 354

²⁶ *Ibid.*

institutions and the private sector, and the hesitancy for graduates to pursue public service careers.”

Without doubt, the Ministry of the Environment has been doubly affected by the radical reduction in operating capacity that was affected in 1996. The dramatic reduction in capacity has not only objectively robbed the MOE of the raw number of workers required to protect human health and the environment, but also, by undercutting the power of the Ministry and its employees to achieve its vision, has affected the ability of the Ministry’s leadership to “maintain and motivate an empowered workforce.”

Despite Mr. Justice O’Connor’s recommendations and the Ministry’s own Human Resources plan, MOE staff have not been able to significantly increase Management Board’s allocation of time and finances for technical training.

Within the Technical Support Sections of Regional Offices, hydrogeologists are now being required to become Professional Geoscientists. The Ministry is making no commitment toward the cost of the training and certification required for this designation. Within the Laboratory Service Branch, the scientific heart of the Ministry, the MOE is still struggling to be permitted to spend 1% of total salaries and wages on training.²⁷

These types of decisions contradict the Ministry’s own Human Resource plan and the recommendations of Mr. Justice O’Connor’s report. They are, unfortunately, further evidence that the Ministry and Management Board are not committed to the needed rebuilding of the Ministry.

The concerns raised by the 2000/01 Human Resource Business Plan and Learning Plan have not been addressed by central agencies. Perhaps due to the unreceptive response from Management Board, no Human Resource and Learning Plan was developed for 2001/02 and none is in development for 2002/2003.

14. Management Board must allocate at least five job-related training days per year for each MOE position

15. A total budget equivalent to 8% of wages and salaries should be committed to MOE staff training

The Ministry has also failed to develop a stepped training plan linked to each occupation within the Ministry. Such a plan would assess the essential and technical skills and knowledge required in each occupation and deliver training courses, initiated at job start and progressively delivered at appropriate intervals thereafter.

Within the Investigations and Enforcement Branch (IEB) new investigators hired as recently as mid-2001 have been put on the job without training. Prior to budget reductions, a learning program of more than a month was standard. Most of the Environmental Officers – even many who are regularly assigned to water inspections – have not received specialized training at either the basic or advanced level, despite assurances from the government.

16. Career training plans must be created for each Ministry occupation

Classroom training is, of course, only one aspect of learning. Proper on-the-job training based on apprenticeship, mentoring or peer coaching is a valid and important way of learning. Mr. Justice O’Connor recognizes the value of such training, which takes a number of years.

²⁷ Training expenditures at the Branch were 0.93% of salaries and wages in 00/01

However, the government's insistence on temporary fixes makes it impossible to accrue the necessary skills and knowledge through on-the-job learning.

Junior employees with a desire and potential to learn are being lost to the search for permanent employment. For example, of the 25 temporary Environmental Officers hired immediately after the Walkerton, two have already left to take permanent positions elsewhere. Such turnover undermines the ability to create continuity and experience in the MOE's staff.

17. On-the-job training must be enhanced by converting temporary staff to permanent status

Water Plant Operators

Mr. Justice O'Connor has raised several issues with respect to the training of water plant operators. Recommendation 20 directs the government to require all operators to become certified through the completion of an examination. Recommendation 21 directs the MOE to ensure that the programs for operators emphasize specific learning outcomes. Recommendation 22 urges that the required 40 hours of annual training should be defined.

The government has said it will require the examinations, develop the materials and clearly define the regulation regarding annual training.

However, the context raises great difficulties. The Ministry can develop new curriculum and even require that certain subject matter be instructed, but it is currently impossible to ensure that water plant operators will actually receive courses based on the curriculum because the Ministry has lost control over the curriculum. As a result, the MOE can no longer ensure standardized learning outcomes.

In the early 1990s the MOE developed the water plant operator curriculum. The curriculum was delivered by the MOE in Brampton. This role was continued by OCWA after Utilities Operations were transferred to the Crown Agency. A group of community colleges were funded approximately \$135,000 per year to make the courses available in other regions of the province. The courses were heavily subsidized to remove barriers to attendance.

When OCWA was placed on a strict non-subsidy basis in the later 1990s, the agency ceased to offer public courses at subsidized prices. Also, funding for the community colleges was removed. As a result, municipalities lacked access to employee training. The government response to municipal concerns was to require OCWA to make the curriculum public. Now, any municipality or private consultant could deliver the MOE/OCWA courses.

However, there is no guarantee of instructor quality or means of ensuring that the complete curriculum is taught. Simply changing Regulation 435/93 as suggested in the government response is an inadequate solution.

In 2000, OCWA developed a new program to enhance its training program. The program recruited senior plant operators and enrolled them in a train-the-trainer program. In 2002, OCWA will be using these plant-floor experts to conduct training in 15 communities across Ontario.

Because OCWA has the delivery capacity and operates under a Memorandum of Understanding with the MOE, the Agency can be used to regain control of the delivery of the curriculum to ensure adherence to MOE learning requirements. To re-assert control over training content, the MOE should amend its MOU with the Agency to direct it to deliver the new MOE curriculum and

can also direct it to ensure that its courses be available to water operators employed by municipalities.

18. The Memorandum of Agreement with OCWA should be amended to ensure delivery of a new MOE curriculum and to ensure access to its delivery for municipal waterworks operators.

Additionally, the MOE, OCWA and the Association of Colleges of Applied Arts and Technology of Ontario (ACAATO) should partner to accredit the training program. Regulation 435/93 should be amended to specify that only accredited programs be recognized. Only in such a way can control over the curriculum be guaranteed and standardized learning outcomes achieved.

19. Only accredited water operator courses must be recognized through an amendment to O. Reg. 435/93.

In order to increase access and to provide an incentive to enroll students in accredited learning, the MOU should also set a per-seat subsidy recoverable by the employer of the recipient of the training, whether that employer be a municipal waterworks or OCWA.

20. Rebates should be payable to waterworks operating organizations for all fees paid for accredited learning.

Justice O'Connor has also indicated that all water facilities operators who received their certification through grandfathering must undergo an examination in order to maintain the certificate.

Given the aversion of many adult learners to written tests, these examinations should be available for completion through a demonstration of skills. Such demonstrations would have to cover the breadth of the written exam and must test for the presence of the same skills and knowledge.

21. Demonstration of skill examinations must be developed to remove biases from the certification process

Information Management

When the Ministry of the Environment issued the Certificate of Approval to construct Well 5 in January, 1979, hydrogeologic reports recognized its susceptibility to the influence of surface water. Because of this finding, the MOE required the Walkerton PUC to test its water daily and record the level of residual chlorine. If the water failed to meet MOE specified standards, the use of the well was to be stopped. These requirements were not transmitted to the MOE Approvals Branch, as it was not required for inclusion in the Certificate. The hydrogeologic report was maintained in the District Office files for review by the Environmental Officer.

By the time of the critical February 1998 inspection, the 1979 report recognizing surface water influence had been removed from the files and was not available to the Environmental Officer inspecting the site. Had the report been accessible, the inspector would have known of the direct influence of surface water on Well 5 and would have identified the need for residual chlorine monitors, which would have prevented the outbreak.

For this reason, Mr. Justice O'Connor, recommends the "expeditious" completion of the Integrated Divisional System (IDS), a program for tracking the full history of each water system. He recommends that the IDS link the following data:

1. Consultants' hydrogeological, engineering or similar reports
2. Residual chlorine levels
3. MOE Inspection reports
4. Drinking water test reports for a reasonable period
5. Current Certificates of Approval
6. Active Permits To Take Water
7. MOE field and Director's Orders and occurrence reports
8. Information regarding the security of water sources and supply

The government has said that the IDS project will be complete by the end of 2002.

The implementation of the IDS has been on the MOE's agenda for several years, but has run into numerous difficulties. Originally, the MOE contracted PriceWaterhouseCoopers which sub-contracted the job. However, there were numerous concerns about the work and insufficient attention from inside the MOE to ensure that what was being developed was what was needed.

This lack of attention has been attributed to the lack of continuity with the Information Technology Branch and confusion caused by the government-wide consolidation of information technology branches into a Management Board-controlled Shared Services Bureau.

During the consolidation under Shared Services Bureau, the salaries of information technology managers skyrocketed to ensure recruitment and retention in the context of growing private sector demand. However, the compensation of software designers was capped, leading employees to careers outside the public service. This lack of continuity resulted in an imbalance in knowledge between those in the public service responsible for the project and the workers with the contracting company actually developing the product. The public sector failed to act as an informed and intelligent purchaser of information technology services.

MOE staff are strongly supportive of the creation of a proper information management system that will aid their inspection, abatement and investigation work. However, many remain deeply skeptical of the IDS project. Not only are there concerns that the project will not be finished on schedule, but there are concerns that the product will be difficult to use.

22. The IDS project's critical path must be made public and reports on progress should be made public on at least a bi-monthly basis.

23. Management Board must be prepared to add financial resources and internal expertise in case of lapses in the critical path.

Conclusions

Ministry staff participated in the Walkerton Inquiry and welcome Mr. Justice O'Connor's report. We see many of our concerns addressed in his recommendations and findings. We are committed to full implementation of these recommendations.

Recent years have been difficult for the Ministry's staff and the employees of OCWA. As the Ministry's own studies show, we don't see our work with the MOE or OCWA as "just a job." We are involved in the work – some would say the battle – to protect our environment and our fellow citizens from danger, illness and death.

Though we are professional members of the public service, responsible to the policy-makers and their appointees, we also work to keep faith with the broader public who put their trust in us and in whose interest we work. Over the past few years, these twin relationships have become virtual competing interests.

As employees of the MOE and OCWA, we understand the complexity of the challenge and the resources needed to rebuild the Ministry and the water treatment system of Ontario. We believe our checklist details the actions necessary to implement Mr. Justice O'Connor's recommendations.

While there are many detailed items on our checklist, our concerns can be summarized into three general themes:

- Adequate and permanent resources must be committed to water protection.
- We want the opportunity to learn how to be the best environmental protectors possible.
- We are concerned about the IDS system and want to it completed as committed.

The Ministry must be rebuilt to serve Ontario effectively. All staff in MOE and OCWA are committed to environmental protection and water quality we all can trust.