

The Walkerton Inquiry

Notes on the Expert Meeting

Provincial Regulation for Drinking Water Safety II

**Ryerson University
May 31st -June 1st 2001**

REVIEW DRAFT

Topics Discussed

Role and Regulation of Laboratories
Role of the Ontario Ministry of Agriculture, Food, and Rural Affairs
Role of Municipalities, and the tools available to them for Drinking Water Safety

The detailed notes for this expert meeting have been prepared to brief the Commissioner and to facilitate participation in Part 2 by those who were not present at the meeting. The notes are intended to represent the major items of discussion and positions put forward by participants. They are based on notes taken by Rapporteurs and are not intended to be an official report or transcript of the meeting. They do not represent the views of the Commissioner.

Meeting Summary

The agenda, prepared for the meeting by the Chair, provided the framework for the meeting notes. The notes summarize the main points of contention and agreement between the parties under the themes of the agenda:

1. Role and Regulation of Laboratories:

There was consensus on the need for government labs, for both research and routine testing. Issues were raised, in support of government labs, about the public good, the importance of trend analysis, breadth and scope, and surveillance. Concerns were raised about government cutbacks resulting in a lack of overall capacity from the loss of expertise, outdated equipment, and reduced financial resources. Concerns were also raised about the reliability of data from private well testing. There was general agreement on the need for strong accreditation, transparency, and effective coordination.

2. Role of the Ontario Ministry of Agriculture, Food, and Rural Affairs:

A greater regulatory structure (provincial) is needed within nutrient management legislation in order to protect drinking water safety. There was some contention whether MOE should be the lead agency. If so, OMAFRA would provide extensive field expertise and guidance to the process. Greater co-ordination and communication between MOE and OMAFRA is required. Nutrient Management Plans and Certificates of Approval were discussed as tools for source protection. These were considered to be open to improvement and enforcement concerns were also raised.

3. Role of Municipalities, and the Tools Available to Them:

General agreement (not including the CFF) on the need for a provincial role to avoid the patchwork effect of differing standards and rules in different municipalities. There are conflicting reasons offered in support of this argument and different roles were discussed.

Meeting Participants and Affiliations

Chair	Ron Foerster
Issue Paper Author, University of Guelph	Kim Rollins
Issue Paper Author	Jane Pagel
Government of Ontario	
Ministry of the Environment (MOE)	Jim MacLean
Ministry of Agriculture, Food and Rural Affairs (OMAFRA)	Jim Wheeler
Ministry of Municipal Affairs and Housing	Carol Antle Audrey Bennett Jim Thurgood Scott Thompson
Ministry of Health (MOH) Smith Lyons	Nicholas Paul Jim Ayres
Association of Local Public Health Agencies (ALPHA)	Andrew Papadopoulos
Ontario Water Works Association/ Ontario Municipal Water Association (OWWA/OMWA)	Joe Castrilli Brian Pett (May 31, 2001)
Ontario Public Service Employees Union (OPSEU)	Bill Tobin Don Eady Arthur Ley Bill Armstrong
Office of the Chief Coroner	Thos Wilson David Gruber
Association of Municipalities of Ontario (AMO)	Nicola Crawhall
Concerned Walkerton Citizens/ Canadian Environmental Law Association (CELA)	Theresa McClenaghan Rick Lindgren
Pollution Probe (PP)	Rick Findlay
Ontario Medical Association (OMA)	Carol Jacobson Ted Boadway
OMA, Quality Management Program, Laboratory Services	Harold Richardson

Conservation Ontario (CO)

Mary-Ann Wilson
Tracey Ryan
Leslie Vanclief
Charlie Worte

ALERT/Sierra Coalition

Don Mills
Jackie Harman
Dru Heagle
Jennifer McLellan

Ontario Federation of Agriculture (OFA)

Paul Verkely
David Armitage

Christian Farmers Federation (CFF)

Elbert van Donkersgoed

Ontario Pork (OP)

Dennis Zeruel
Sam Bradshaw

Dairy Farmers of Ontario (DF of O)

Debbie Brander

Research Advisory Panel Members

Harry Swain
Allison McGeer
Doug MacDonald

Walkerton Inquiry Staff:

James Van Loon

Rapporteur Team Leader

Carolyn Johns

Rapporteurs

Sarah Wolfe
Sarah Hartley

Discussion of Substantive Issues

1. ROLE AND REGULATION OF LABORATORIES

1.1. Is there a need for Government owned labs? If so, in what areas?

There was consensus on the need for government labs for a variety of reasons. There was a distinction made between research labs and routine testing and surveillance labs.

1.1.1. Research Labs

- A distinction was recognized between the role of labs in research and routine testing (OPSEU). Research was defined as "methods development", "hypothesis driven" and involved in the development of technology (Richardson). It supports government policy and involves the development and evaluation of existing and evolving technologies (Swain, Foerster, McGeer).
- Methods development should remain in the public sector (MOE, MOH), as it should be considered a public good. Research should remain a function of government labs (OPSEU)
- The OMA suggested that the question of where research should be conducted was dependent upon capacity criteria.
- OWWA/OMWA raised concerns about private labs citing an example from the Waterloo area in which an appropriate lab was difficult to find due to the lack of government labs in the area.
- It was noted that there was only one MOE research lab in Ontario and that staffing of microbiologists has gone from 12 to 1 in MOE. (OPSEU).
- Priorities of MOE labs are set based on customers. There is a methods development program based on partnerships with industry and universities. This is done annually, with recognition for continuity and the agenda is driven by ministry needs. (MOE). The methods development committee also includes private labs (Pagel).
- Difference was noted to exist between microbiology and chemistry - microbiology is more complex (OPSEU).

1.1.2 Resources and Expertise

- It was noted that MOH and MOE have problems keeping expertise (Pagel, Foerster). The difficulty attracting research staff to MOE and MOH labs is that there is not

enough focus or resources for their research role, particularly compared to 15-20 years ago. Government labs were once prestigious, but are now lacking in resources (Pagel).

- This was also thought to be a result of resource cutbacks leading to increased layoffs of technical support and senior staff. This has serious consequences in the form of reduced capacity in government labs in the area of research (OPSEU) and surveillance (ALPHA).
- Resource cutbacks have resulted in reduced capacity. In particular, there is a problem replacing old and outdated equipment (OPSEU). This results in a loss of expertise as new equipment is needed to attract good scientists (Pagel). Cutbacks have reduced the acquisition of new technology (AMO, OPSEU).
- MOE labs have a budget to support core functions and work beyond that can be negotiated (discretion is involved here). MOE noted that resources were made available for methods development and for acquiring new technology. In response to a question by Swain regarding what level of resourcing is needed, MOE responded that there have always been needs and the budget requires flexibility due to the unpredictability of emergencies (MOE).
- OPSEU questioned the availability of resources to replace and maintain equipment. OPSEU also noted that there is pressure not to exceed the budget. This becomes particularly acute if emergencies have used up the allocated budget. The Plastimet fire was cited as an example. OPSEU also commented that although "customers" are said to have a say in determining the priorities of labs, the MOE didn't consult when public labs were moved out.
- Following a question by CELA, the MOE noted that resources are not a factor in decisions to proceed with prosecutions. Prosecutions were noted to be high priority for lab support.
- When emergencies occur, then more routine work can be delayed (MOE, CELA). For example, samples are stored until resources are available to "catch up". Private labs are used to manage backlogs, and during emergencies (MOE). MOE noted that due to public expenditure controls, and checks and balances, government labs have less flexibility to change workforce numbers quickly compared to private sector labs.
- Government labs need resources to participate in partnerships (OPSEU).

1.1.3 Government / private partnerships

- Funding cuts have improved government / private partnerships. Although the MOE's relationship with private labs is now much better, the links for research between MOE and private labs needs improving. The methods development committee needs

broadening and rethinking (Pagel).

- There were some reservations about the suitability of private sector involvement in research due to the profit motivation (OPSEU).
- MOE noted that partnerships were struck with private companies for research, especially when new technologies were involved.

1.1.4 Government / university partnerships

- Partnerships between government labs and universities were recommended for research (MOH, Pagel).
- MOH agreed that government / university partnerships for methods development are positive but there are currently obstacles such as lack of initiative to develop networks (MOH).
- Government / university partnerships were difficult due to a lack of funding on the part of universities - particularly for methods development (McGeer)
- The MOE pointed out that an active research program exists involving partnerships with industry and universities. This agenda is driven by MOE needs and included standards development, new substances, etc.

1.1.5 Routine Testing

- Routine testing is triggered in three ways. (1) the public bring in samples to the Health Department; (2) The Health Department requests a test; (3) Water works request a test (OMA)
- There is a role for government in routine testing. Indeed, it is expected. There is a need to gain meaningful information rather than simply answers. There is a need to look at trends across the province. (OPSEU)
- OWWA/OMWA noted that quality in private labs is uneven and results often take too long.
- Water testing has essentially been given up by the MOE since 1996, and the outsourcing of work is considered normal. This results in reduced quality of data (OPSEU).
- The OMA noted that private labs are just as capable conducting tests. Quality must be assessed regularly through a system to identify and correct problems.
- Richardson drew attention to medical labs and noted that these existed in the community (private labs), hospitals and Public Health Departments. Labs do all or some of the work and can pass work on to other labs easily, they operate as a referral

system supported by a reference facility. The public system provides the reference facility.

1.1.6 Surveillance

- Surveillance has suffered due to cutbacks. Labs saw a drastic increase after Walkerton. Depends on how "routine testing" is defined. Quality is a concern in private labs where frequency of tests is high (OPSEU).
- OMA outlined that it is not just simply more surveillance that is required because you will generate a large response and not get much more data. ALPHA agrees that it needs to be targeted and more expertise is needed for surveillance.
- Underreporting is also an important issue. This is occurring due to public and doctors' perceptions about burdening the health system (CELA, OMA, ALPHA). Doctors are not ordering samples for these reasons (CELA). Further, healthy people are often not badly effected by waterborne diseases, and therefore do not see a doctor (ALPHA). Delays in testing, follow-up, and notification also cause underreporting (ALPHA). Underreporting results in less surveillance and less testing (OMA).
- Public education was considered as a possible solution to the problem of underreporting. However, increased awareness results in an increase in the "chaff" as well as the "wheat" (OMA, ALPHA). Avoiding illness was seen to be a priority over reporting illness (ALPHA).
- McGeer suggested that perhaps more resources were needed for surveillance, rather than public education. ALPHA indicated that there are 37 health units reporting now but the database and capabilities to analyze are not there. Problems with surveillance are less concerned with availability of information, and more to do with the lack of mechanisms for sorting data (ALPHA).
- The OMA noted the importance of surveillance, and the importance of capacity in this regard, with the example of the Hepatitis B incident in Toronto. Here, large numbers of cases were required before the tragic consequences were discovered. The connection was made by eye rather than sophisticated technology. There was no central registry of the cases - there is a need to collect this data provincially.

1.2. The Role of Municipal Labs

1.2.1 *Should municipalities be encouraged to maintain their own labs for some testing?*

- Municipalities are less concerned about whether a lab is public or private, and more concerned about the type of testing, the turnaround, and cost (AMO).

- There is more and more downloading to municipalities and private well owners for both treated and raw water. There is a question of who is responsible for monitoring raw water on the provincial scale - this is MOE's responsibility but they have never done it. CO agreed that trend analysis is needed and that there will be variability based on watersheds.

1.2.2 Does a conflict of interest arise by combining the treatment and testing functions?

- A conflict of interest is possible, but there are solutions to this problem. The City of Toronto separates the functions. The lab performs routine testing under its water treatment plants (process control lab work) but does not conduct regulatory reporting work for the plants. (OWWA/OMWA).

1.3. Government Oversight of Labs

1.3.1 Certification and accreditation of labs

- Conservation Ontario raised concerns about accreditation. While a company may have accreditation overall, some tests it performs may not be covered. Questions were raised about whose role it is to ensure companies use new methods (CO, Pagel).
- All water works register which accredited labs they use, and the Canadian Association of Environmental and Analytical Laboratories (CAEAL) and the Canadian Standards Association (CSA) identify which methods labs use. This information is then checked by MOE. The data system will not allow water works to register labs for unaccredited methods (MOE).
- The new regulation in Ontario specifically requires that accredited labs be used. The OWWA/OMWA stated that the province introduced regulations on accreditation too quickly. The need to use accredited labs took some water utilities by surprise as many utilities already had in-house capabilities. The need to implement the testing requirements in the new regulations quickly did not allow utilities sufficient time to respond. However, the OWWA/OMWA agrees with the need for accreditation and noted that most municipalities have requested that health units sign off on the quarterly reports required under the new regulations.
- AMO also stated the timeliness is an issue for municipalities and thought it would be beneficial if municipalities could do some testing on site rather than being required to go to an accredited lab.

1.3.2 Public Access to Data

- The involvement of private labs in routine testing also raises concerns about access to data (OPSEU).

1.3.3 Private Well Testing

- Private well testing quite different from municipal testing. (OPSEU) Public health labs (not accredited and not providing routine testing for municipal water), do test for private wells. Reliability is suspect and MOH maintains no records of those results. (OPSEU) Also only certain parameters tested. (Pagel)
- Is there a need for more education of private well owners? (Foerster) Already provided on collection bottles but more proactive approach needed. For example in Waterloo, provide free bottles and outreach (ALERT/Sierra)
- Is there coordination of information from private wells and municipal systems? Municipalities are now required to submit quarterly reports, but not for source water. Links to MOH databases coming and there is some information from private labs under real estate transaction databases which we are considering whether to collect. (MOE)

1.3.4 Other - General Accreditation

- OPSEU stated that trend analysis has been dismantled since 1993 and only now trying to rebuild it. Privatization of labs has resulted in scrambling to try and put accreditation in place and now information systems.(OPSEU)
- Referring to Jane Pagel's paper, Swain questioned whether the accreditation system is as good as we can get? Richardson replied "no" and cited the standards in place for medical labs and the use of ISO to grant accreditation. Richardson also stated there is a need for accreditation based on the lab and its processes. He suggested the International Standards for Medical Laboratories could also be used as a model.
- OPSEU questioned the comparison between medical labs and environmental labs arguing that sampling and environmental testing are more complex and citing the Pagel paper (p.18). The pre-analytical and post-analytical components are very important as is the compilation and analysis of trends in reports. These reports used to be done by the MOE, they were discontinued when Regional MOE labs were closed. Both medical officers and environmental officers used these reports.
- CELA outlined they did review the legislative context of the medical lab system and found there is no such legislation or regulations for water.
- OPSEU argued that the discussion was losing sight of the reason why testing was shifted to the private sector, not because of the client, not because of a cost-benefit analysis but to save money and allow private labs into the business. OPSEU expressed concern that the system is based on the assumption that there is a good working model presently and that some labs are excellent but others are not - need for monitoring accredited labs.

- MOE pointed out that a file is maintained and updated frequently and that there is a possibility of audit. MOE also is involved in accreditation audits of these labs.(MOE)
- AMO also stated the timeliness is an issue for municipalities and thought it would be beneficial if municipalities could do some testing on site rather than being required to go to an accredited lab.

2. ROLE OF THE ONTARIO MINISTRY OF AGRICULTURE, FOOD, AND RURAL AFFAIRS (OMAFRA)

2.1 The integration of manure management and environmental management practices into a source protection regime. Is there room for improvement?

- At present there is very little or no integration of manure management and environmental management practices into a source protection regime so it would seem that there is only room for improvement (ALERT/Sierra)
- There is a need for a provincial framework for protection of water. Currently, there is not overlap between agencies so much as gaps in authority between agencies. (CO, OWWA/OMWA). To develop an effective provincial strategy on source water protection in the agricultural context you need at least a foundation based in law and a ministry - preferably MOE to take the lead (OMMA/OMWA). This must be done while recognizing that every farm is unique - product, management skills, geography etc. Therefore, best management practices are unique to each farm (OFA). Specific goals, focused on water, must be incorporated into the integrated strategy (Rollins).
- Foerster proposed that a semiformal group from all relevant ministries charged with responsibility of overseeing and developing the policies for water management would be appropriate. Would there be specific drawbacks?
- OMFRA outlined that there is integration which may seem invisible. Over the last decade there have been efforts to work with MOE, farmers organizations and more recently with Municipal Affairs.
- For integration and management to succeed, it is essential to examine different levels of government. A key agency must be charged with taking the lead on the issue of source protection rather than management through committee; the agency must be able to balance special interest groups and take action. The MOE was proposed as this responsible body (CO, Rollins, OPSEU).
- As priorities shift, different approaches emerge within an integration or management strategy and may often depend on the intensity of the crisis: (1) continuous improvement all over Ontario or (2) hot spots where remedial action is required. (OMAFRA) Programs to address watershed protection tend to be short-lived but should be ongoing in order to provide continuous improvement. (CO,

OWWA/OMWA) You cannot fully address sources of water pollution without dealing with non-point sources. Two-thirds of the pollution in US waterways is from non-point sources and the bulk of that is from agriculture. If those percentages apply in Ontario, and there is no reason to doubt that they do, then both point and non-point sources must be addressed.(OWWA/OMWA)

- An integrated groundwater and surface water strategy needs to be incorporated into a water management plan (CELA)

2.2 What is the adequacy of the current regulatory regime relating to potential threats to drinking water safety? Is there room for improvement?

- A greater regulatory structure (provincial) is needed within nutrient management legislation in order to protect drinking water safety. The scope of enforcement, and accountability should be located within the upper tier of government. There is a commitment by the Government to bring in something firm and they believe a more mandatory regulatory structure should be in place. (OMAFRA, OFA, CELA).
- The proposed Nutrient Management Act [<http://www.gov.on.ca/OMAFRA/english/agops/index.html>] was discussed as one component of improving the regulatory framework related to drinking water safety.
- MOE should be the lead agency but OMAFRA would provide extensive field expertise and guidance to the process. Greater co-ordination and communication between MOE and OMAFRA is required. Increased resources are critical for both bodies to proactively protect Ontario's drinking water sources. (OPSEU, Foerster, OWWA/OMWA, OFA)
- OMAFRA outlined that there is coordination through formal and informal mechanisms such as the Deputy Minister Committee on Resources and inter-ministerial committees.
- OPSEU supports a lead ministry with responsibility for clean water - the MOE. CELA's preference for a lead agency would be MOE, but would settle for a joint lead with OMAFRA. They would also consider an agriculture division within the MOE. OPSEU also expressed concern about inter-ministerial committees with no legislative authority.
- OFA outlined that the Pesticides Act indicates a lead role of MOE that works very well but would support a shared model in the case of nutrient management.
- OMAFRA's advocacy role for the agricultural sector and the potential conflict of interest should be considered (OPSEU, CELA, OMAFRA)
- Responsibility for source water protection can not [should not] be downloaded to municipalities and OMAFRA. Responsibility for source water protection should not

be downloaded to municipalities by the province. MOE needs to be in picture for drinking water protection in the agriculture sector (OWWA/OMWA)

- Because of the large number of farms being dealt with in Ontario, over 60 000¹, to develop a regulation with sufficient oversight does not seem realistic in terms of implementation and enforcement. A robust system and mechanism to allow assessment of whether an operator is following farm-specific nutrient management plan which would be legally required. The nutrient management plan would be facilitated and supported by OMAFRA and include a third party review. (OFA).
- A nutrient management plan is, as the name suggests, a method of controlling nutrients on a farm, it is not a source protection scheme and does not specifically address either groundwater or bacteria. (ALERT/Sierra)
- The regulation would be based on a complaints driven mechanism or periodic auditing system using adequate auditing and enforcement procedures with penalties for non-compliance (OFA)
- An on-farm, provincially required, hydrogeological-based standard should be required as part of the nutrient management plan (OMAFRA).
- CELA noted that Certificates of Approval are different from land use planning and can be site specific [and potentially as comprehensive as nutrient management plans].
- Reform and renewal of the Certificates of Approval process needs to be considered for intensive farming practices. This approval process might be potentially revised for other farm practices, but intensive systems are critical.
- It is not possible to achieve the perfect system to protect the water system; agriculture must make sacrifices. There is great opportunity to improve upon the current lack of regulation with respect to groundwater source protection. However, regulation that would provide strong source protection may also include additional requirements of the agricultural industry (Sierra /Alert).

2.3 Standards for manure management. How are these best achieved?

- OWWA/OMWA noted that in the U.S. virtually every state regulates animal feedings operations above a certain number of animals under a permit system authorized in conjunction with federal water pollution control law requirements. For example, Alabama issues permits to cover all operations with at least 250 animal units. Minnesota issues state feedlot permits to facilities with more than 10 animal units. Currently under federal law in the US, the number of animal units that would result in

¹ Mills noted that as a result of farm consolidation in Ontario, the numbers of livestock is actually dwindling.

the application of federal water pollution control requirements to a concentrated animal feeding operation (CAFO) is under debate. It is currently set at 1000 animal units, but a lower threshold may be adopted in the near future by US EPA along with other regulatory criteria such as proximity of animal feeding operations to bodies of water. (OMMA/OMWA)

- Rollins clarified that the Federal level in the US sets a minimum basic standard and individual states can intensify the standards but may not enact legislation which is below federal standards. In Ontario's case, the province would set the minimum levels for manure management and a lower tier would set their standards based on local conditions.
- There was some concern that differential standards, would result in "chasing the cows around the province". Rollins agreed that this is also a problem in the states. However, she urged recognition that large animal units cause less environmental impact in some areas.
- Mills noted that while the U.S has excellent standards "on the books", they are rarely enforced. OFA argued for a flexible, farm by farm approach that is based upon "conditions" rather than "time" which incorporate currently agreed upon practices (ALERT/Sierra, OFA). CELA stated that minimum provincial standards should be as prescriptive as possible, but maintain flexibility.
- "currently agreed upon practices" need to be reviewed with respect to their impacts on the environment. There is clear evidence to suggest that some of our currently agreed upon practices are insufficient. New minimum provincial standards need to be carefully laid out so that farm practices do not negatively impact our water resources. (ALERT/Sierra)

2.4 The adequacy of inspection, abatement and enforcement practices. Is there room for improvement?

- OP argued that the problem is lack of enforcement. MOE should handle spills but nutrient management issues are different usually the result of a complaint. Using existing agricultural advisory committees locally - mediation is one approach - an interim step before enforcement. We would like an MOE agricultural team working with OMAFA and agricultural advisory committees.
- In general, there is insufficient water quality data available in Ontario to provide an MOE inspector with the proof needed to enforce action as a result of a complaint. (ALERT/Sierra) A labour-management, mediation model works in terms of problem-solving but it is not proactive. Current municipal by-laws for manure management are also concentrated in certain counties. (OPSEU)
- The MOE should maintain its responsibility for spills and emergency situations.

Regarding the enforcement of nutrient management plan and permitting systems: the most significant requirement is sufficient resources to meet the requirements of that role. It is not in the Government self interest to develop a scheme without the required support resources; the level of resources available should be considered in designing the system and its enforcement needs (OMAFRA, OPSEU, CELA).

- Enforcement and inspection of intensive farming operations should be the responsibility of the province (preferably the MOE and/or a lead agency within the MOE - contingent on proper 'resourcing' and expertise) (CELA).
- The inspection and enforcement function should be left with the MOE and have OMAFRA working with the farming community to ensure compliance. OMAFRA has the expertise to field specific agriculture questions (OPSEU).
- Pollution prevention should be a farmer driven project. The primary partners required are OMAFRA and municipalities. This is where inspection and standards legislation should come from (CFF). A voluntary aspect should also be included in inspection, abatement and enforcement because farming is not science but art. Regulatory approval won't work because science isn't available to support decision-makers. Therefore, peer assistance to identify problems and create solutions is necessary (CFF).

2.5 In addition to a clear regulatory regime and adequate enforcement of those regulations, what other tools would work well to encourage practices that meet or exceed standards?

- Rollins proposed that nutrient management plans are effective in other jurisdictions as vehicles towards a tailor made [site specific] system. She noted that nutrient management plans are not the only tool and that integrate strategies - a collection of goals and variety of ways to achieve these goals - are critical. This type of strategy may require a particular mix of a planning act or other tools (agricultural ministry guidelines).
- ALERT/Sierra cautioned the group that nutrient management plans do not include as assessment of the site hydrology or geology and therefore are inadequate to predict groundwater impacts. Two plans in completely different environments can look quite similar and provide similar recommendations when the consequences of those recommendations on local water resources may be quite different.
- Over last decade (1990s) there has been considerable efforts in farm communities to undertake education/demonstrations (OMAFRA).
- Within last few years, co-operative ventures with municipal affairs and housing, have developed as a result of conflict with rural issues. These initiatives addressed three concerns: environmental, economic and socio-economic issues in agriculture and

rural issues. The potential for conflict between society and agriculture must be considered in any integrated strategy or new legislation (OMAFRA).

- OMAFRA noted that informal and semi formal structures between the MOE and OMAFRA have developed.
- CELA expressed concern that the aforementioned task force was not in the context of a provincial water protection strategy and did not want it to be mistaken for an overall water management strategy.
- The development of an effective tracking system or database for bio-solid application through the Certificate of Approval is an obvious first place to start towards integration between safe drinking water and manure application (CELA).
- The goal of policy and regulation development must be approached through a goal of protecting groundwater. Excellent work has been done by OMAFRA and OFEC in past 10 years but problems have always been approached through the agricultural needs perspective [and groundwater accommodating]; this needs to be reversed and needs to start with water quality as a focus (ALERT/Sierra).
- Similar to the Planning Act where the province writes policy statements, CFF says this is needed for environmental protection under the Planning Act - not additional legislation. The proposed nutrient management legislation could result in provincial policy statements for municipalities (CFF)
- OFA agrees that there is a land-use planning component and cites the siting of wells as an example. OPSEU outlined that there have been partnerships between Conservation Authorities and MOE in the past under Clean Up Rural Beaches but this, along with proposed changes to the Planning Act, were abandoned.
- CO stated that programming needs to be longer term. Rural water quality programming in Waterloo is a 5-10 year framework based on a series of continuous improvements and partnerships.

3. ROLE OF MUNICIPALITIES AND THE TOOLS AVAILABLE FOR DRINKING WATER SAFETY

3.1 The role of municipalities in source protection for drinking water safety

- Municipalities should not have downloaded on them the primary regulatory responsibility for drinking water source protection. This exceeds their original mandates with respect to zoning and development approvals under municipal planning legislation.(AMO, OWWA/OMWA) Municipalities only assumed the role of attempting to manage water supplies as a result of a provincial leadership void (AMO, OP, ALPHA, OFA, CELA)

- CFF outlined that specific steps have been taken by municipalities for example, manure management by-laws. AMO argued that this is a patchwork approach and municipalities have not been able to act due to Ontario Municipal Board (OMB) challenges. This has resulted in planners engaged in OMB hearings and defending their bylaws. This is a poor use of resources (AMO). OMAFRA outlined that although the province has opposed some by-laws, they have generally been supportive.
- Municipal use of bylaws to manage drinking water sources opens municipalities to high level of pressure from interest groups (OFA).
- ALERT/Sierra questioned whether municipal bylaws are being set low because they can not enforce them. They also point out that 50% of nutrient management bylaws in existence don't require renewal. We must, therefore, have provincial standards that municipalities can enforce. OWWA/OMWA agreed that enforcement of sophisticated water requirements (such as contained in nutrient management plan by-laws) without adequate resources is a primary problem for municipalities. Fragmentation roles and responsibilities for source water safety has resulted in less compliance and enforcement (OWWA/OMWA).
- CELA argued that municipalities have a broader role than AMO suggested through the health, safety and welfare protection under the Municipal Act. For example, municipalities can regulate against cosmetic pesticide use. Province must set minimum floor but municipality must have necessary tools (regulatory and non regulatory)
- Recognizing the importance of non-point source pollution, noted by the International Joint Commission in 1980, OWWA/OMWA suggested that municipalities have the potential to deal with issues such as soil erosion and sediment management more generally. OWWA/OMWA noted that municipalities lack the capacity to manage non-point source pollution. The expertise lies with MOE or the Conservation Authorities.
- AMO argued that Conservation Authorities were not elected and this raised accountability concerns.
- The Conservation Authorities are controlled by the municipalities and are a good vehicle for collective action, providing a good knowledge base for consultation and for monitoring. They can play a supportive role rather than a regulatory role. Conservation Authorities have the same capacity issues as the municipalities - they rely on the same tax base (CO).

3.2 Have municipalities been given sufficient tools to deal with their responsibilities?

3.2.1 *The Planning Act*

- CELA stated that municipalities will not be able to defend their bylaws in front of the OMB. Interim suggestions for reform of the Planning Act include:
 1. Explicit references to ensure drinking water quality/quantity in the purpose section of the Planning Act
 2. Empowering crown to issue policy statements on municipal roles and responsibilities regarding drinking water
 3. Establish the primacy of drinking water protection were there are conflicting priorities for municipalities.
 4. In relation to the Provincial Policy Statement, the Planning Act's current "have regard" language should be replaced by former Bill 163's "shall be consistent with" requirement.
 5. Need to develop and implement policy manual for how to protect drinking water.
 6. Based on the model bylaws produced by the Minister of the Environment for sewer use etc, develop a model for a drinking water protection model. These are doable and practical - amendments to the planning act (OFA agrees).

- CO disagreed and noted that seven sections (ie. 2.4) do relate to protection of drinking water. The problem is with the transition from a policy statement to its implementation and a lack of guidance on how to interpret or apply the policy. Also, a lack of data (ie sensitive groundwater areas) to support the application of policy to protect a sensitive recharge area and a total lack of monitoring.

- Zoning and land use planning are not good tools to manage drinking water safety or source protection. These tools are useless for controlling what happens in the zones. AMO argued that the Planning Act is not the appropriate vehicle as it does not relate to activities on the land in terms of land use. This is a Provincial responsibility (AMO, OPSEU, Foerster, ALPHA).

- AMO outlined that the Planning Act applies to future uses. It is not applied to existing uses nor does apply to how land is used. More importantly (or at least as important), is the capacity of municipalities to use the tools that exist. That varies across the province. (ie. Peel, Bruce etc all have different capacities) Our role is to offer resources to the counties so that they can achieve similar standards (OPSEU).

- The Planning Act can say nothing about developments already approved. It offers no retroactive regulatory control (AMO, Foerster, OPSEU, ALPHA).

- Land use planning should be the first line of defense for how agriculture fits into the environment. Effective planning reduces the reliance on management practices to mitigate poor siting practices and other environmental risks. CFF would like municipalities to provide guidance in:
 1. Specific zone in which larger enterprises must go; designated for these systems
 2. Accept municipalities putting a cap on size of farms based on livestock numbers. Rationale for supporting that is to keep livestock scattered across

countryside (CFF).

- Ontario Pork expressed concern that the numbers being set by municipal council will be extremely low if local and/or vocal special interests have influence.
- ALERT/Sierra highlighted that activists do not often have money to drive agriculture into the ground. Municipalities don't have the money either so partnerships are required to pool resources because it is unable to defend its decisions.
- The Planning Act can be used to set aside specific zones in large farms can be sited, and can allocate zones where a cap on the size of the livestock enterprise is in place (CFF). The CFF noted that the Ontario government should change the Planning Act to allow municipalities to do carry out these two functions, and should set strict limits (e.g. 500 animals) so municipalities cannot have any flexibility (either higher or lower) in this regard.
- The social aspect of cap setting includes a major consideration of maintenance of the family farm and the fabric of rural society intact (OMAFRA).
- OFA reminded the meeting participants that zoning or restrictive barriers affects people's incomes and this places pressure on municipalities ability to put in bylaws. Therefore, change to planning perspective needs to be gradual with large public support and in consideration of changes of technology.

3.2.2 *The Municipal Act*

- CELA noted that municipalities have a broader role then the AMO suggested. The Municipal Act empowers municipalities to protect the welfare of citizens. The example of regulating pesticides was offered as an example. Here many municipalities have gone further then the legislative requirements under the Pesticides Act (Ontario) and the Pest Control Products Act (federal). Foerster noted that in the example of pesticide use offered by CELA, there existed federal/provincial legislation. This was not the case with drinking water safety.
- Pollution prevention is not covered under this Act. This is hard to regulate at the municipal level (OFA).
- OWWA/OMWA discussed the adequacy of the Municipal Act (Section 102, Section 210-sub paragraph 144) as enabling authority for enactment of nutrient management plan by-laws. OWWA/OMWA argued that it is not surprising that so many by-laws are being challenged before the OMB and the courts, as the statutory authority for the by-laws is "thin". The Planning Act also does not provide scope for nutrient management planning. OWWA/OMWA expressed concern about using a proposed new Agricultural Operations Act, to be administered by OMAFRA and potentially municipalities, to address source water protection issues.
- OPSEU asked for consideration of the relationship between municipal jurisdiction

and water which transcends municipal borders. He noted that basic geography needs to be incorporated and this includes a provincial role. Notes that generally there has been a step back from Bill 163 (natural heritage being one exception). Possible to use MOE model sewer-use by-laws in other areas such as a source protection by-law model? Stressed that upstream/downstream issues provide rationale for provincial role and that ministries were taken out of the planning process to reduce barriers to development. Argues that MOE has to be a participant in this process.

- OFA outlined that municipalities are up against private property rights related to these issues. ALERT/Sierra also pointed out that the concept of integrated liability needs to recognize that land, facilities and animals may be owned by different interests.

3.3 Municipal Role in Public Health

- Foerster asked whether there were instances when public health units were required to step in?
- ALPHA highlighted its work on private wells where inspection staff was responding to drastically increased sampling requirements by labs and dealing with the public. Health Units' standard food premise inspection practices have decreased to a quarter of inspections because of the increased demands of water samples. He noted that it is difficult for Public Health to be a preventative service when it is constantly reacting to emergency situations.