alPHa

Association of Local
PUBLIC HEALTH
Agencies

Association of Local Public Health Agencies (alPHa) and Association of Supervisors of Public Health Inspectors (ASPHIO)

Proposed Recommendations: Public Hearing # 6: Standards; Technology; Small Systems

August 23, 2001

INTRODUCTION

Local boards of health have an immediate and direct interest in water quality. Access to a safe and sufficient supply of potable drinking water is a prerequisite for health. Under the Health Protection and Promotion Act, medical officers of health and public health inspectors are empowered to protect community health through the elimination or mitigation of health hazards.

The Mandatory Health Programs and Services Guidelines (MHPSG) provide the framework for public health programs in Ontario. The goal of the Safe Water program is to reduce the incidence of water-borne illness in the population, and as a primary objective, to ensure that community drinking water systems meet the health-related chemical, physical, microbiological and radionuclide objectives as published in the *Ontario Drinking Water Objectives (revised 1994)* and the *Guidelines for Canadian Drinking Water Quality (sixth edition)*. (Note – the Ontario Drinking Water Objectives have been superceded by the Ontario Drinking Water Standards (ODWS) August 2000).

Concerning private water systems, the Safe Water program requires local boards of health to interpret water analysis reports, provide information regarding the potential health effects and provide information about the health-related parameters as published in the ODWS (Ministry of Health, December. 1997).

The primary goal of local boards of health is to prevent disease and injury and to promote and protect health. This includes addressing the safety of drinking water, but it is important to note that its protection and maintenance lie with different agencies. Hydrogeological assessments, inspections of manure storage facilities, examination of utility records and water testing are all important undertakings for ensuring water quality but they are unlikely to be carried out by a single regulatory body. Ministries of the Environment, Natural Resources and Agriculture Farms and Rural Affairs and municipalities all have important roles to play in the protection of drinking water. The role of public health in this matrix is the protection of the health of the end user. This should not be interpreted as a general duty of health units to oversee the operation of water systems, but rather to protect the community from risks to health that may appear within them. The public health system (medical officers, boards of health, public health unit staff) thus constitutes one partner among many that have responsibilities for ensuring safe water.

Our recommendations for this hearing are limited to item # 12 regarding small and private systems. Please note that they are largely extracted from the following documents:

1. Draft alPHa/ASPHIO position paper on private wells (not yet finalized, to be included with final submission in October)
2. ASPHIO response to Ontario Regulation 903 respecting wells (Appendix 1).
3. alPHa / ASPHIO response to the proposed regulation of small systems serving designated facilities (Appendix 2)

We refer you also to our recommendations submitted during Public Hearings 2 & 3, regarding Provincial Government Functions and Resources, (Included for your convenience in Appendix

3). We believe that these recommendations are relevant to an overall strategy that will include the protection of water in small and private systems.

RECOMMENDATIONS FOR PRIVATE SYSTEMS

Drinking Water Sources:

Principles for Management

Source protection

This must be recognized as the first defense in ensuring safe drinking water supplies, since many consumers using a private drinking water supply do not rely on water treatment prior to use.

Public awareness and education

This must be recognized as a primary tool in protecting drinking water supplies, as enforcement measures and capacity are not always feasible:
guidance to help individuals and communities protect groundwater supplies (e.g. Wellhead Protection Tool Kit)
information on drinking water standards and health-related parameters
assistance with drinking water monitoring and testing
clear understanding of the rights and responsibilities of individual well owners
access to information about the risks to water sources and the need for appropriate treatment

Land use

Itemizing, understanding and assessing the potential impact of all local land uses on water quality is essential and must include input from relevant stakeholders. Accurate and up *to date* data on aquifers (hydrogeological studies and GIS mapping) as well as of well locations, capacity and usage are integral to this process.

Federal Policy

Under the Federal Water Policy statement on Water Quality Management, the federal government role, in cooperation with the provinces, is to develop strategies for identifying the nature and extent of water contamination, and to support measures to protect water quality. The Federal Water Policy statement on Safe Drinking Water recognizes that the protection of drinking water is a shared responsibility of all levels of government and commits to helping all jurisdictions in setting safe drinking water standards. The statement also addresses the need for promoting public awareness and understanding of critical issues respecting drinking water safety, such as prevention of contamination of drinking water sources from land area run-off (NOTE: the Federal Water Policy of 1987 was tabled in Parliament but not extended into a national policy). These strategies to protect drinking water sources, and ensure drinking water safety,

should be specifically outlined and, where applicable, recommended for legislation (e.g. national standards for water quality).

Protective Standards

- Federal guidelines for drinking water quality should be the minimum requirement for provincial drinking water, and should be legislated as standards for drinking water quality for all drinking water systems. The Guidelines for Canadian Drinking Water Quality are intended to apply to **all drinking water supplies, public and private**. However, they are not legally enforceable standards unless written into appropriate provincial legislation/policy.

- Given that the Ministry of Health, under the Health Protection and Promotion Act, sets Mandatory Programs such as the Safe Water Program, the requirements of this program should be revised to include actions to protect groundwater sources e.g. "in consultation with other ministries and local municipalities, ensure that groundwater contamination is investigated, identified and managed/prevented."

- As the Ministry of Agriculture, Food and Rural Affairs has set proposed standards under the Nutrient Management Act for agricultural operations applying nutrients to land, the implementation of this Act should be phased in as quickly as possible in order to reduce potential groundwater contamination from these sources.

- An integrated, comprehensive water management plan , involving all relevant ministries and agencies involved in land use planning (MMAH, MTO, MNR, OMAFRA, Ministry of Citizen, Culture and Recreation, and the Ministry of Northern Development and Mines), should be incorporated into all Official Plans, and required under the Planning Act, in order to ensure that all aspects of potential for groundwater contamination are addressed and managed

- Local health units, as part of the Mandatory Safe Water program, should be involved in all land use planning that has the potential to impact on groundwater quality

- Water providers and water users must have access to information, and the opportunity for input, on all land-use planning decisions impacting on drinking water sources (i.e. similar to Environmental Registry requirements for provincial ministries)

- The responsibility for protecting all aspects of drinking water quality, (by coordinating government policies on drinking water) should be designated to one lead agency:
    - several government agencies, at all levels, have legislation or policies involving drinking water quality and groundwater protection
    - several resource users (agriculture, industry, development, transportation, recreation, mining, forestry etc.) impact on drinking water sources
    - the potential and actual impact of these resource users, should be monitored by the appropriate agency, as coordinated by the lead agency.

Well Regulations:

The existing legislation governing well construction and maintenance in Ontario (Regulation 903 respecting Wells under the Ontario Water Resources Act) needs to be strengthened in the areas of monitoring, enforcement and contamination control. Specifically, alPHa and ASPHIO recommend the following:

- That a permit or Certificate of Approval be required for construction of individual wells, and that a Use Permit be required for operation, the issued upon inspection of the completed well, including a water test. This would improve monitoring and enforcement of construction requirements, as well as facilitate a more complete cataloguing of wells in the province.

- That inspections or consultations be carried out to ensure that wells are properly maintained as well as abandoned in compliance with the regulation. Reference should also be made to the OBC Part 8 (sewage systems) that all abandoned wells within the required distances are identified and properly filled in.

- That water sampling requirements be implemented for private wells. These requirements must be based on risk assessments (which would occur during the permit process) and must take into account the potential cost to the well owner, the potential impacts on ground water by processes outside of the owner's control, and the Government responsibility for monitoring and protecting overall groundwater quality.

- That a database be considered for private systems, which would include

    - an inventory of all wells, existing and abandoned, to be provided to municipalities for consideration in land use planning
    - all sources of potential contamination (agricultural, domestic, industrial etc.) in vicinity of a given wellhead to determine impact on water supply
    - proof or documentation that treatment requirements have been met, where required
    - The diagrams provided on the well record, including details indicating where on-sewage systems and other sources of pollution are located in relation to the well.

- That owner rights and responsibilities in wellhead protection and groundwater protection be clearly outlined in well maintenance and protection from contamination sections of the regulation, and that the well owner be educated on these during the permit process or during inspections / consultations.

- That Ontario require training and certification of well contractors, and inspectors, including a mandatory waterborne disease component. Examinations developed should be consistent in content and types of questions for all areas of the province.

Water Distribution Systems:

Drinking Water Materials should be legislated at the federal level and educating the public on the maintenance of these devices should be a priority.

Drinking Water Materials (e.g. Treatment Devices):

The Drinking Water Materials Safety Act was introduced by Health Canada in 1996 to protect consumers, by preventing unsafe drinking water materials from being sold or imported into Canada. The Act would require certification of water treatment devices, water treatment additives and water system components for which health based performance standards have been established.

About 100,000 home water treatment devices are sold annually in Canada; studies have shown that water passing through an improperly maintained home filtration device may have levels of bacteria up to 2000 times higher than levels in unfiltered water

As this Act has not yet been passed, there are currently no specific regulations for drinking water treatment devices. Presently, Health Canada strongly recommends that consumers wishing to use water treatment devices, purchase one that is certified as meeting the applicable ANSI/NSF health-based performance standard. Our recommendation is that the federal government revisit this Act.

Back-Flow Prevention:

Back-Flow Prevention for existing buildings, especially high hazard buildings (e.g. plating industry, hospitals) should be legislated at the federal level, to protect the potable water systems from point of use contamination. Presently, the authority to regulate Back-Flow Prevention for existing buildings rests with the local municipality

RECOMMENDATIONS FOR SMALL WATER SYSTEMS

Our first broad recommendation is that the MOE reconsider recommendations made during the discussion paper process in order to address the pressing need to regulate the operation and monitoring of small waterworks in general. While the proposed regulation of Designated Facilities does address perceived high-risk areas, large gaps still exist in the overall regulatory protection of drinking water. What follows is a reiteration of the recommendations alPHa and ASPHIO made with these gaps in mind.

Summary of Recommendations made in the alPHa / ASPHIO submission in response to the discussion paper:

1. That the Small Public Waterworks Regulation (SPWR) establish a definition for a small public waterworks as: 25 or more people served or 15 or more service connections, operating at least 30 days per year or serving at least 750 people on one or more days; a waterworks serving populations at increased risk of waterborne illness; or a waterworks which uses water for food production and processing.

2. That the Ministry of Environment establish an internet accessible Register of Ontario Waterworks to contain data by community of all waterworks including the name, location, source, plant, and population served. This Register would categorize each waterworks as to whether it falls under the DWPR or proposed SPWR.

3. That all small public waterworks be classified by the Ministry of Environment accounting for the source of water (surface, surface under the direct influence of ground water, ground water).

4. That all small public waterworks drawing from a surface water source be required to ensure the provision of a minimum level of treatment consisting of chemically assisted filtration and disinfection.

5. That all small public waterworks drawing from a ground water source under the direct influence of surface water be required to ensure the provision of a minimum level of treatment consisting of filtration and disinfection.

6. That all small public waterworks obtaining water from a ground water source not under the direct influence of surface water be required to ensure the provision of a minimum level of treatment consisting of disinfection.

7. That the Ministry of Environment undertake a hydrogeologic sensitivity assessment of all non-disinfecting ground water systems to determine the vulnerability to microbial contamination, need for disinfection and other corrective action.

8. The SPWR should define requirements for bacteriologic and chemical testing of small public waterworks. Minimum frequencies for bacteriologic testing should be specified. A schedule for chemical testing should be specified which might be based on category specific results. Radionuclide testing should be included if locally relevant.

9. That the template for notification and corrective action included in the DWPR be utilized in the SPWR, with appropriate modification to deal with the requirements of small waterworks.

10. That the regional offices of the Ministry of Environment be provided with sufficient staff and resources to monitor and enforce the regulation.

11. That local boards of health be provided with sufficient staff and resources to support implementation of the regulation, including the monitoring and enforcement role where relevant.

CONCLUSION

We submit these recommendations in the context of our desire for a comprehensive and integrated policy for the management of water resources in Ontario. Given that this must necessarily include strategies for drinking water sustainability and quality for the province as a whole, the needs of the approximately 2 million Ontarians who rely on private systems must be addressed.

We acknowledge the difficulty of implementing regulatory strategies for private systems, but it must be recognized that these systems are not isolated nor are they self-contained. They are access points to larger aquifers, they can be impacted by land uses beyond the control of the owner, and the owner may not be aware of the responsibilities of owning and operating a well.

We submit that stronger regulation of private systems will accomplish the following:

1. Increased opportunities to consult with and educate owners , operators, installers and inspectors of private systems on potential health risks and how to mitigate them
2. Increased local knowledge of locations of wells (operational and abandoned) as access points to the aquifer in a watershed, especially in relation to existing or potential sources of contamination.
3. Added and essential level of consideration in a comprehensive and integrated provincial water management strategy
4. Added level of safety and reduced burden of illness for the significant number of Ontario residents relying on private systems, through monitoring and identifying potential threats to health before they are realized.

APPENDIX 1 – ASPHIO Response to O. Reg. 903

ASPHIO The Association of Supervisors of Public Health Inspectors of Ontario (Incorporated 1982)

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December 29, 2000

Ontario Ministry of Health and Long-Term Care
Public Health Branch
C/o Mr. Fred Ruf, Senior Policy Analyst
8th Floor, 5700 Yonge Street
Toronto, Ontario M2M 4K5

Dear Mr. Ruf,

Re: **Ontario Regulation 903 Respecting Wells**

In response to your December 19th , 2000 fax memorandum to all Public Health Units in Ontario, regarding the opportunity to provide comments on the above noted regulation, below please find our preliminary comments and suggestions that you requested.

It is our understanding that comments forwarded to the Public Health Branch will be provided to the Land Use Policy Branch of the Ministry of the Environment, whose staff are currently reviewing this legislation.

We have also provided these comments to the Safe Water Working Group - Private Water Systems, that has been established under alPHa. This working group is in the process of reviewing the issue of Public Health's role with respect to private water systems. Members include Medical Officers of Health and Directors/Managers of Environmental Health, representing ASPHIO, from various Health Units in Ontario.

It is ASPHIO's preliminary view that Regulation 903 needs to be strengthened as noted below and that a priority should be to add adequate human resources to properly monitor and enforce this regulation. More thorough enforcement is needed to confirm that qualifications of well technicians are current and applicable to the work completed. Once additional staffing is in place all new

wells need to be inspected. Also abandoned wells require inspection to confirm compliance with the regulation. This is not occurring often enough, if at all.

- **Sect. 6(3) 1.** Some kind of monitoring system should be in place to ensure that where an apprenticeship is offered to obtain the required qualifications, a minimum training content is provided.
- **Sect. 8. 8. (1)** Examinations developed should be consistent in content areas and types of questions for all areas of the province.
- **Sect. 11 (4) (a) and 15. 15 (1)** Reference is made to providing a water sample to the owner of the well (for viewing) and for chlorination to occur. A declaration from the installer or plumber should be included in the well record documentation that chlorination did actually occur and the methodology that was used. A bacteriological sample should also be provided (minimum 3 consecutive) as an indication of the potability of the supply. Analysis for Nitrate and Fluoride should also be included in the suite of tests once the supply has been declared suitable for use. Alternatively, as a bare minimum the owner should be advised (on the well certificate or separate info) to sample the new supply within 30 days to establish a base line potability status.
- **Sect. 11 (5), Sect. 12. and the final well record form.** The diagram provided on the well record should be detailed enough to indicate where on-sewage systems and other sources of pollution are located in relation to the well. Confirmation is needed that the proper distances have been provided, especially in situations where the well is drilled after the sewage system has been installed. Distance to neighbouring sewage systems needs to be included.
- **Sect. 12. (2), 12(7)** Manure storage needs to be mentioned specifically as part of the definition of "source of pollution".
- **Sect. 14 (6) and 14 (7**) The opportunity to drill a well within a shallow well and this section should be deleted and outlawed. There have been numerous examples of drilled well contamination where this situation has been allowed.
- **Sect. 17** Where a well pit exists, or is allowed for a new well installation, confirmation is needed that proper drainage is provided in situations where flooding of the pit may occur.
- **Sect. 20** As part of contamination control, backflow prevention devices should be required where a line from the well serves more than one user type. I.e. barn and house or shed. This is especially important where the well is new but serving older buildings that may not meet the OBC Part 7 (plumbing code).
- **Sect. 20(3)** Add a section, which requires certification or documentation that the owner understands their responsibility in protecting the well from contamination that is referred to in Sect. 20 (3)
- **Sect. 21** Municipalities should be required to document and have a database of all abandoned wells with a monitoring requirement to ensure that contamination is prevented through proper abandonment or protection provided where the usage is infrequent. Reference should also be made to the OBC Part 8 (sewage systems) that all abandoned wells within the required distances are identified and properly filled in.
- **Sect. 21 (5)** Specific reference is needed to require inspection or confirmation that well has been properly abandoned. Similar documentation is needed that confirms that the well is ready for use as per the regulation.
- **Forms.** An emergency 911-locator number should be included in all forms with address or lot and concession information requirements where applicable.

These are our preliminary comments on the Regulation, given the very short response time. We trust that there will be additional opportunities for us to make further comments on revisions proposed by the Ministry of the Environment.

We also expect that this Regulation will be part of an overall groundwater protection strategy that ASPHIO called for in our September 15th comments to OMAFRA's Proposed Standards of Agricultural Operations. The need for a coordinated, comprehensive approach to groundwater protection was also recommended by the Environmental Commissioner of Ontario, Gord Miller.

The Safe Water Working Group's comments should also be taken into account when this Regulation is amended and when the Public Health Branch revitalizes the Safe Water Mandatory Program.

Thank you for allowing us the opportunity to make these preliminary comments on this important legislative review. If you have any questions of clarification, please contact Klaus Seeger, who reviewed the Regulation on behalf of ASPHIO, at the Oxford County Board of Health.

Yours truly,

James Reffle, BA, MPA, CPHI(C)
President, ASPHIO

Cc: The Honourable David Newman - Minister of the Environment
Gord Miller - Environmental Commissioner of Ontario
Andy Papadopoulos - Executive Director alPHa
Suzanne Shaw - President of CIPHI (Ontario Branch)
Bill Hunter - MOHLTC - Public Health Branch
Helen Doyle - Safe Water Working Group - Private Water Systems

APPENDIX 2 -

alPHa / ASPHIO response to proposed Drinking Water Protection Regulation for Designated Facilities

On August 9, 2000, the Minister of Environment published a discussion paper, *Protecting Drinking Water for Small Waterworks in Ontario*. The Paper highlighted the Ontario government's efforts to improve drinking water quality and protect public safety. It followed the introduction of the Drinking Water Protection Regulation for large waterworks. The Paper posed a series of questions about the need for and potential content of a counterpart regulation for small waterworks in Ontario.

Small waterworks were defined as those that use less than 50,000 litres of water on any given day and serve five or fewer residences. Many of these supply water for boarding houses, small to medium size restaurants, tourist lodgings, assembly halls, churches, camps and other outdoor recreation facilities, gas stations and shopping centres. Small schools, small hospitals, long-term care facilities and day nurseries that have their own waterworks were also identified as facilities that might fall under the purview of a proposed regulation for small systems. It was acknowledged in the Ministry's Operation Clean Water that there is a need to address the appropriate level of regulation for these systems.

The Ministry launched a consultation with the owners and users of small waterworks and a discussion paper was released to guide the consultation process, for which alPHa and the Association of Supervisors of Public Health Inspectors of Ontario (ASPHIO) submitted a response in November, 2000 (Appendix 1). In it, the examples given above (and others) were cited as of crucial importance for inclusion in order to ensure that the comprehensive and effective drinking water protection promised by Operation Clean Water is achieved.

With the posting of the proposed Drinking Water Protection Regulation for Designated Facilities, it was widely expected that regulatory coverage would be provided for waterworks that do not meet the criteria of O. Reg 459/00, yet provide potable water to the public (excluding private systems serving only their owners). This assumption was based on the content of the MOE Discussion Paper. Only a small proportion of this has been addressed by the current regulatory response.

The current proposed regulation seems to addresses primarily facilities that house what might be considered vulnerable populations – by virtue of physical or mental infirmity or by virtue of close-quartered and large numbers of people. Our members do acknowledge the importance of specific protection of these populations from health hazards, but are also expressing concern about the significant number of waterworks that remain unregulated, from which significant numbers of Ontarians draw their water. These concerns are magnified given the expectation that the proposed regulation would reflect the needs identified in the discussion paper.

In the alPHa / ASPHIO submission, difficulties in applying a single regulatory standard to the diversity of what might be considered small waterworks were acknowledged, and suggestions were given on what to consider when classifying them. The common link among them however

is the provision of water on a routine basis to residents of and visitors to Ontario. In order to account for the diversity of size and purpose among them, a risk-assessment approach to classification was recommended, based on the models of the USEPA and the New Zealand Register of Community Drinking Water Supplies.

In limiting this proposed regulation to the types of facilities described, it could be considered a small but integral part of a comprehensive water system management framework for all public water supplies. This framework could be based on the above approach, and would provide a sound basis for regulatory coverage of the waterworks not addressed by the existing and proposed Drinking Water Protection regulations.

RECOMMENDATIONS AND COMMENTS

Our first broad recommendation is that the MOE reconsider recommendations made during the discussion paper process in order to address the pressing need to regulate the operation and monitoring of small waterworks in general. While the proposed regulation of Designated Facilities does address perceived high-risk areas, large gaps still exist in the overall regulatory protection of drinking water. What follows is a reiteration of the recommendations alPHa and ASPHIO made with these gaps in mind.

Summary of Recommendations made in the alPHa / ASPHIO submission in response to the discussion paper:

12. That the Small Public Waterworks Regulation (SPWR) establish a definition for a small public waterworks as: 25 or more people served or 15 or more service connections, operating at least 30 days per year or serving at least 750 people on one or more days; a waterworks serving populations at increased risk of waterborne illness; or a waterworks which uses water for food production and processing.

13. That the Ministry of Environment establish an internet accessible Register of Ontario Waterworks to contain data by community of all waterworks including the name, location, source, plant, and population served. This Register would categorize each waterworks as to whether it falls under the DWPR or proposed SPWR.

14. That all small public waterworks be classified by the Ministry of Environment accounting for the source of water (surface, surface under the direct influence of ground water, ground water).

15. That all small public waterworks drawing from a surface water source be required to ensure the provision of a minimum level of treatment consisting of chemically assisted filtration and disinfection.

16. That all small public waterworks drawing from a ground water source under the direct influence of surface water be required to ensure the provision of a minimum level of treatment consisting of filtration and disinfection.

17. That all small public waterworks obtaining water from a ground water source not under the direct influence of surface water be required to ensure the provision of a minimum level of treatment consisting of disinfection.

18. That the Ministry of Environment undertake a hydrogeologic sensitivity assessment of all non-disinfecting ground water systems to determine the vulnerability to microbial contamination, need for disinfection and other corrective action.

19. The SPWR should define requirements for bacteriologic and chemical testing of small public waterworks. Minimum frequencies for bacteriologic testing should be specified. A schedule for chemical testing should be specified which might be based on category specific results. Radionuclide testing should be included if locally relevant.

20. That the template for notification and corrective action included in the DWPR be utilized in the SPWR, with appropriate modification to deal with the requirements of small waterworks.

21. That the regional offices of the Ministry of Environment be provided with sufficient staff and resources to monitor and enforce the regulation.

22. That local boards of health be provided with sufficient staff and resources to support implementation of the regulation, including the monitoring and enforcement role where relevant.

The complete report containing these recommendations and their rationale is appended to and should be considered a part of this submission of comments on the proposed regulation.

Recommendations and comments in response to the proposed regulation

1. There are no definitions of what constitute a treatment and distribution system. These should be included, and more details on procedure should be considered, keeping in mind that regulatory requirements will be carried out by people whose primary function may not be operating a waterworks.

2. Clearer criteria for becoming a "trained person" as identified in the regulation are recommended. The inclusion of a mandatory water borne disease component and the identification of those permitted to provide the training are examples of what we would like to see. Properly-resourced health units might be logical providers of this training.

3. Some health units include communities whose technological infrastructure will not allow them to meet the requirements of the new regulation. Schools in Amish or Mennonite communities are examples of facilities that might require special consideration.

4. Page 6, 1(1) Concern has been expressed by our members about the exemption of social care facilities (e.g. day nurseries) located in private residences.

5. Page 7 2 (3) If this regulation does not apply to a water treatment system that obtains all of its water from a treatment or distribution system covered by this regulation or regulation 459/00, what covers potential degradation or loss of chlorine residual within the system not covered? Where is the regulatory protection of drinking water once it enters the exempt system?

6. There is an inconsistency with accepted practice in the Schedule, which requires five minutes of boiling time as a corrective action inadequate disinfection. The literature recommends one minute, a practice that is reflected in the Ministry of Health and Long Term Care's draft Boil Water Advisory Protocol.

Other General Comments and Recommendations

1. As with Ontario Regulation 459/00, further clarification is required of the specific roles and responsibilities within the MOE, the MOHLTC and the "interested authorities" as identified in the proposed regulation. More specific to health units, what is the expectation beyond reacting to adverse water quality results?

2. It is strongly recommended that the MOE ensure that enough abatement / enforcement / inspection staff are available to ensure compliance on a routine basis for all regulated waterworks.

3. While the focus of the proposed regulation seems to be high-risk populations, it is worth noting that summer camps are not covered. These are generally populated by the same demographic as schools, with the added component of temporary residency, which means that the water used at the camp is a much more significant issue.

4. In one health unit last year, it was estimated that 50 out of 60 Boil Water Advisories issued locally last year were for systems which would not be regulated under either the existing or the proposed Drinking Water Protection Regulations. In another, it was determined that the vast majority of small waterworks were either food premises or communal systems serving five or fewer residences. This serves only to reinforce the importance of a *comprehensive* regulatory strategy for the protection of drinking water.

APPENDIX 3 - Association of Local Public Health Agencies (alPHa) Proposed Recommendations: Public Hearing # 2 & 3: Provincial Government: Functions and Resources

Local boards of health have an immediate and direct interest in water quality. Access to a safe and sufficient supply of potable drinking water is a prerequisite for health. Under the Health Protection and Promotion Act, medical officers of health and public health inspectors are empowered to protect community health through the elimination or mitigation of health hazards.

The Mandatory Health Programs and Services Guidelines provide the framework for public health programs in Ontario. The goal of the Safe Water program is to reduce the incidence of water-borne illness in the population, and as a primary objective, to ensure that community drinking water systems meet the health-related chemical, physical, microbiological and radionuclide objectives as published in the *Ontario Drinking Water Objectives (revised 1994)* and the *Guidelines for Canadian Drinking Water Quality (sixth edition)*. (Note – the Ontario Drinking Water Objectives have been superceded by the Ontario Drinking Water Standards, August 2000).

The primary goal of local boards of health is to prevent disease and injury and to promote and protect health. The responsibilities for ensuring the protection and maintenance of drinking water however lie with different agencies. Hydrogeological assessments, inspections of manure storage facilities, examination of utility records and water testing are all important components in ensuring water quality but they are unlikely to be carried out by a single regulatory body. Ministries of the Environment, Natural Resources and Agriculture Farms and Rural Affairs and municipalities all have important roles to play in the protection of drinking water. The protection of the health of the end user however falls squarely within the purview of the public health system. This should not be interpreted as a general duty of health units to oversee the operation of water systems, but rather to protect the community from health hazards that may appear within them. The public health system (medical officers, boards of health, public health unit staff) thus constitutes one mechanism among many that have responsibilities for ensuring safe water.

The following are recommendations that if implemented will assist the public health system in fulfilling these responsibilities.

Overall Policy and Standards

Recommendation

Ontario must ensure that a coordinated/integrated policy exists for drinking water that ensures that all agencies with jurisdiction over drinking water related issues are aware of each other's responsibilities and of where lines of communication must be maintained. This must include strict reporting requirements and documentation of adherence to standards and policies generated by each.

Rationale

The importance of coordination of these agencies cannot be overstated. The lack of consistent flow of information and the lack of clear policy on what to do with it leads to a disjointed system that delays the quick identification and remediation of problems.

There has been significant discussion about lead responsibility for drinking water. The fact is that several agencies have jurisdiction over activities that may impact it, and the expertise of each is valuable to the protection of potable water. Ministries of Health, Environment, Agriculture, Food and Rural Affairs, Natural Resources, Municipalities and local Boards of Health all have regulatory and/or policy functions in this respect.

The informal coordinmation that has taken place among these bodies in the past may now need to be formalized, as the reduction of available resources has put strains on some of these individual agencies' abilities to carry out their own duties, let alone keep an eye on those of others. Because these considerations involve so many agencies, it is essential that each have a general familiarity with the source-to-tap flow of drinking water

The Canadian Environmental Law Association has suggested a Drinking Water Commission, which would oversee the delivery of Ontario's overall drinking water program. While alPHa is not necessarily endorsing this specific approach, the idea of involving representatives from all of the above bodies in a unified coordinating body would ensure a consolidation of all of the expertise required for the protection of drinking water. This would lead to better coordination, communication, training, clarification of roles, and reduction of conflicts.

Strategies that are implemented to protect water and the health of its consumers would thus originate from a unified, effective and comprehensive quality system that will greatly reduce the incidence of water-borne disease

Recommendation

That the Ontario Government implement a new public health strategy that places more emphasis on prevention and education, as well as raises the profile of public health.

Rationale

By raising the status of health promotion and prevention of disease, the government may enhance public awareness of its importance, and attract the skilled staff required to implement the provisions of the Health Protection and Promotion Act (HPPA) and the Mandatory Health Programs and Services Guidelines (MHPSG). This must of course be accompanied by a willingness to increase resources that will ensure a more active role for public health agencies in the provision of safe drinking water.

Recommendation

That the Medical Officer of Health, Chief Medical Officer of Health and the Public Health Branch have a stronger role in the development of regulations and policies that may impact drinking water.

Rationale

This will ensure a health protection perspective in policy decisions that may originate from agencies for whom that perspective is not of primary concern. The expertise of medical officers and Public Health Branch staff would be of great value in identifying potential health impacts of agricultural and environmental policy decisions.

Approvals / Licensing

Recommendation –

Ontario must require training and certification of well contractors, waterworks operators and inspectors, including a mandatory waterborne disease component.

Rationale

The delivery of a safe water supply will depend in large part on the skills of the technicians responsible for it. System operators, technicians and analysts play a critical role in the reliable delivery of drinking water. Effective oversight and management of the water-delivery process requires expertise on maintenance requirements, knowledge of standards and the reasons for them, and overall competency with interpreting observations on system performance. Beyond the technical requirements that ensure the integrity of water-delivery hardware, it is important that technicians have a basic understanding of why those requirements exist. A basic understanding of the modes of transmission of waterborne disease and the methods used to prevent them is essential to the proper delivery of potable water. Mandatory training and certification requirements should include this understanding.

Recommendation

That MOH or designate have the opportunity to comment on approvals dealing with land use, septic systems and well construction within his or her jurisdiction.

Rationale

The approving body (e.g. MOE, Municipality) may not necessarily have the appropriate perspective for recognizing potential threats to public health in such plans. By ensuring that input, risks may be identified and changes can be made in the planning stages. Health inspectors

already employ this approach for food premises. It is an effective opportunity to consult with operators and contractors who may not have complete knowledge of compliance requirements.

Oversight

Recommendation

Ontario must ensure that each regulatory body has the authority and the resources to properly carry out verification and enforcement duties enabled by their statutes and regulations. Clear and timely follow up must be required in all cases where deficiencies are identified, and random and routine inspections must be carried out with appropriate frequency.

Rationale

Verification and enforcement are essential components of regulation, in order to quickly identify and correct non-compliance. By empowering officers to investigate potential impairments to water, to examine relevant records, conduct tests and to require the production of any relevant information, the basis is laid for a periodic and detailed evaluation of the regulated activity in question, whether it be farm practices, land use or water plant operations. During this evaluation, deficiencies can be identified and corrections can be ordered, with the understanding that failure to do so will result in penalties under the Act. Follow-up is of course essential to ensure that any directions to achieve compliance have been carried out. Deterrent penalties constitute incentive to maintain compliance.

The appropriate combination of permits, licenses, record-keeping and routine inspections constitutes an effective verification process. Inspectors designated by legislation governing various land uses, farm practices, wells, septic systems and general environmental protection together verify that the protective systems that ought to be in place in fact are. This function, like monitoring, serves to identify situations that might evolve into real threats to drinking water before they have the opportunity to do so.

Recommendations regarding relationship- to other public institutions

Overall coordination role of Provincial Government

Relationship to Health Units

Recommendation

The Ministry must ensure that incentives are in place to facilitate the recruitment and retention of a fulltime medical officer of health in each health unit

Rationale

The HPPA, under section 62, requires every BOH to have a full time MOH. This requirement is clearly based on the importance of the MOH as the key person responsible for community health protection. There is a significant gap created in a community's public health system where there is no full-time MOH, a gap that constitutes additional risk to that community's health. The MOH plays a key role in decision-making when a community health is at risk, including the issuance of orders and the proper management of outbreaks.

Recommendation

That a clearer, proactive role in water quality be defined for the Health Departments. This might include routine reviews of reports, studies and surveys by water works owners as well as routine microbiological sampling and Free Available Chlorine (FAC) measurements to ensure that water quality parameters are met in every part of the system. It may also involve several possible education functions.

Rationale

While some analysis of roles and reponsibilities of other agencies may be required before defining the precise role of the Health Departments, it is clear that potable water is a public health issue and as such should more directly involve public health agencies. Their responsibility has been shrinking over the years, despite their particular expertise.

Recommendation

That the Ministry of Health and Long Term Care ensure that leadership is provided by Public Health Branch on water-related programs. The requirements of the Safe Water component of the MHPSG should be clarified, and a more consistent system should be in place to ensure that protocols issued are well conceived, properly communicated and that support exists at the branch to ensure that clarification and consistent interpretation ids always available.

Rationale

Questions about the applicability of a Cryptosporidium / Giardia outbreak protocol to the Walkerton E Coli outbreak, lack of clarity on what should be done with inspection reports provided to local health units from MOE and the recent lack of a province-wide standard for the issuance of Boil Water Advisories are three examples tat illustrate this need.

Recommendation
That the MOHLTC ensure that all health units have adequate funding to ensure that all mandatory programs can be carried out according to HPPA, and that additional proactive public health programs an be implemented as enabled by the same statute.

Rationale

In order to ensure that public demands regarding safe water are met, it is essential that health departments be equipped to meet their legal responsibility to investigate health hazard reports and to act immediately to protect the health of the public whenever the report is justified. This is a general duty of the MHPSG that applies to all programs within it. Included in this program are requirements for the provision of timely and essential information to the community and monitoring health hazard management strategies. The purpose of these requirements is to identify health hazards, take appropriate action in order to ensure community health protection and continued public health services delivery in the event of a health hazard.

It has become clear that water quality issues were not a high priority for health units before the Walkerton outbreak. While there is a water quality component under the MHPSG, (Safe Water), which requires health units to receive and respond to adverse water quality results, limited health unit resources may in some cases have led to inadequate consideration of local water quality issues. The assumption was that the agency with primary jurisdiction (i.e. MOE) was doing what it needed to ensure that problems were being dealt with. Built in redundancy was lost.

Boards of Health are required by the HPPA to meet all of the Mandatory Programs, as published by the Minister of Health. These are the minimum public health programs and services required by law for the protection of the health of the community. Given that these Programs are legally enforceable minimum standards, and that the current rate of completion is approximately 70%, the province must immediately ensure that a funding scheme exists that will ensure that all health units can at the very least fulfill all Mandatory Programs, including Safe Water.

Public health has a significant role to play in the delivery of safe drinking water. While it may not be up to local health units to follow up on MOE inspection reports or directly ensure the proper operation of a waterworks, timely knowledge of relevant information from agencies to whom it is up can minimize response time.

Investments required in the public health area are small, relative to the large potential benefits. Funding for public health programs amounts to less than 1% of Ontario's total health-care budget, and even with the cost-sharing arrangement with the municipalities, many health units are unable to fulfill the Mandatory Programs as set out by the province, let alone the additional non-mandatory programs encouraged by the HPPA to meet local needs. This situation is exarcerbated by the need to mobilize already-limited health unit resources to respond to incidents such as the E Coli outbreak in Walkerton, which was not limited to that locale, as all Ontario health units were forced to put a higher priority on water issues.