

## Chapter 13 The Legislative, Regulatory, and Policy Framework

### Contents

13.1	Introduction .....	444
13.2	Constitutional Jurisdiction .....	444
13.3	The Ontario Legislative and Policy Framework in May 2000 .....	445
13.3.1	The <i>Ministry of the Environment Act</i> .....	445
13.3.2	The <i>Ontario Water Resources Act</i> and Regulation 435/93 .....	445
13.3.2.1	The Management of Ontario's Water Supply .....	446
13.3.2.2	The Protection of Ontario's Water Supply .....	447
13.3.2.3	The Waterworks and Sewage Works Regulation .....	448
13.3.3	The <i>Environmental Protection Act</i> .....	449
13.3.4	The <i>Environmental Bill of Rights</i> .....	450
13.3.5	The <i>Health Protection and Promotion Act</i> .....	451
13.3.6	The <i>Public Utilities Act</i> .....	453
13.4	The Ontario Policy Framework in May 2000 .....	454
13.4.1	The <i>Ontario Drinking Water Objectives</i> , 1994 .....	454
13.4.1.1	Unsafe Drinking Water .....	455
13.4.1.2	Deteriorating Drinking Water Quality .....	455
13.4.1.3	Exceedance of Maximum Allowable Concentrations .....	456
13.4.1.4	Monitoring .....	457
13.4.1.5	Legal Status .....	457
13.4.2	The Chlorination Bulletin .....	457
13.4.3	The Drinking Water Protection Regulation .....	459
13.5	The Regulatory Review Process .....	460
13.5.1	Overview .....	460
13.5.2	The Ministry of the Environment's Regulatory Review ..	461
13.5.3	The Red Tape Commission Regulatory Review .....	462
13.5.4	Impact Tests for Regulatory Review .....	463

## Chapter 13 The Legislative, Regulatory, and Policy Framework

### 13.1 Introduction

This chapter outlines the main legislative, regulatory, and policy framework applicable to drinking water systems in Ontario. It also includes a summary of the regulatory review process that was instituted in Ontario in 1995.

### 13.2 Constitutional Jurisdiction

Although constitutional jurisdiction over the environment is shared between the federal government and the provinces, water has become primarily an area of provincial jurisdiction. The *Constitution Act, 1867* grants the provinces a number of sources of regulatory authority over water. Section 109 gives them jurisdiction over natural resources. This section is reinforced by section 92A, which provides the provinces with exclusive jurisdiction over the development, conservation, and management of non-renewable resources. Additionally, section 92 provides provinces with jurisdiction over local works and undertakings, property and civil rights, all matters of a local and private nature, and municipal institutions. These powers give the provinces ample authority to regulate the management of water resources and to protect these resources from pollution.

The provincial jurisdiction over water is not, however, exclusive. The *Constitution Act, 1867* grants the federal government powers to regulate various aspects of water resource management. Section 91 provides for federal jurisdiction over seacoasts and inland fisheries – the most important source of federal authority over matters related to water. This section is the basis of the federal *Fisheries Act*, R.S.C. 1985, c. F-14, section 35(1) which prohibits the carrying on of works or undertakings that result in the harmful alteration, disruption, or destruction of fish habitat. Section 36(3) of the *Fisheries Act* prohibits persons from depositing or permitting the deposit of a deleterious substance into water frequented by fish. Regulations under the *Fisheries Act* limit effluent discharges into the aquatic environment from pulp and paper mills, petroleum refineries, chlor-alkalai plants, meat and poultry plants, metal mining operations, and potato processing plants.

The federal government has also regulated water pollution for the “peace, order and good government” of Canada, and to protect the health and safety of Canadians. It has used its criminal law power to support regulations concerning the release of toxic substances into the water. In addition, section 36 of the *Constitution Act, 1982* specifically provides that both the federal and provincial governments are committed to “providing essential public services of reasonable quality to all Canadians.”

### **13.3 The Ontario Legislative and Policy Framework in May 2000**

Although the jurisdiction over water is shared among the levels of government, the legal framework for the protection and management of water supplies that is applicable to the events of Walkerton in May 2000 consists primarily of the following provincial statutes: the *Ministry of the Environment Act*, the *Ontario Water Resources Act* and the Water and Sewage Works Regulation, the *Environmental Protection Act*, the *Environmental Bill of Rights*, the *Health Promotion and Protection Act*, and the *Public Utilities Act*.

#### **13.3.1 The Ministry of the Environment Act**

The *Ministry of the Environment Act*, R.S.O. 1990, c. M-24, as amended, gives the Minister of the Environment charge over the ministry and empowers the minister to appoint the employees considered necessary for the proper conduct of the ministry’s business. The minister is responsible for administering the legislation assigned to him or her by statute, regulation, or Order-in-Council (s. 4).

#### **13.3.2 The Ontario Water Resources Act and Regulation 435/93**

The *Ontario Water Resources Act*, R.S.O. 1990, c. O-40, as amended (OWRA), is a primary statute for the management and protection of surface and groundwater in the province. The OWRA and its regulations

- prohibit the discharge into water of polluting materials that “may impair the quality of water”;

- enable the MOE to take remedial and enforcement action to protect water quality;
- provide a regime for approvals of water taking, water wells, water supply and treatment facilities and sewage works; and
- enable the Ontario Clean Water Agency to operate municipal water and sewage works.

### ***13.3.2.1 The Management of Ontario's Water Supply***

The OWRA sets out a process by which Permits to Take Water are granted to large-scale water users (s. 34). Permits to Take Water were introduced under the OWRA in 1961 in response to a growing number of disputes between parties taking water from creeks or streams to irrigate tobacco crops. Under the OWRA, a person must have a permit issued by a director in order to take 50,000 L of water per day from a well or wells constructed or deepened after March 29, 1961. During fiscal year 2000–01, a total of 1,540 new and renewal Permits to Take Water were issued. There are now about 5,400 valid Permits to Take Water in the province.

Issues related to the quality of the water sought to be withdrawn are dealt with in the OWRA Certificate of Approval. The establishment, alteration, extension, or replacement of waterworks is prohibited, except in accordance with an approval issued by a director. A director may require an applicant to submit plans, specifications, and an engineer's report or to carry out tests or experiments relating to the water supply before issuing an approval (s. 52). People who establish a waterworks without first obtaining approval may be ordered by a director to provide, at their own expense, the facilities that the director considers necessary (s. 52(3)). The approval is either refused or granted under the terms and conditions that a director deems to be in the public interest (s. 52(4)). The director is also empowered to alter the terms and conditions of approval or to revoke or suspend the approval. A person is prohibited from operating waterworks unless the required approval has been granted and complied with (s. 52(7)). A similar framework is in place for approving sewage works (s. 53).

Provincial officers may inspect a waterworks to determine the causes of any impairment or to ascertain the quality of water, take samples, run tests, require

equipment to be operated, and examine and remove documents (s. 15). They may also use “provincial officer’s orders” or “field orders” to require a person who has contravened the OWRA, a regulation, or a term of a licence to take steps to achieve compliance and to provide an alternative water supply (s. 16).

A municipality may apply to have the Ontario Clean Water Agency (OCWA) operate waterworks or sewage works for the municipality (s. 63(1)). The municipality and OCWA then enter into an agreement by which the municipality pays OCWA to operate the facility. Before May 2000, OCWA had never operated the Walkerton Public Utilities Commission.

### ***13.3.2.2 The Protection of Ontario’s Water Supply***

The Minister of the Environment has supervisory authority over all surface and ground water in Ontario (s. 29). The OWRA prohibits the discharge of any material into water that causes or may cause injury to any person, and requires any person who discharges polluting material into water to notify the minister (ss. 28, 30). It empowers the minister to designate its employees as provincial officers and to appoint Directors (s. 5(1)–(3)). Both provincial officers and directors may require certain actions to protect the public water supply, though directors may require more onerous actions.

A director may prohibit or regulate the discharge of sewage into any waters by any person (s. 31). He or she may also order measures to prevent the impairment of water quality, make equipment changes, or study and report on measures to control the discharge (s. 32). A director may, for the purposes of protection, define an area that includes a source of public water supply and prohibit the discharging of material that may impair water quality or the taking of water if it may diminish the amount of water available as a public water supply (s. 33).

The minister may apply to the Superior Court of Justice for an injunction prohibiting the discharge of any material that may impair water quality (s. 29(3)). If the recipient of a Director’s Order or Minister’s Order does not comply, the director can cause the work to be done and recover the costs from the recipient (ss. 80–84).

### 13.3.2.3 *The Waterworks and Sewage Works Regulation*

Ontario Regulation 435/93 (the Waterworks and Sewage Works Regulation) provides for the classification and licensing of waterworks, sewage works, and facility operators. The regulation divides facilities into four categories: wastewater collection facilities, wastewater treatment facilities, water distribution facilities, and water treatment facilities (s. 3(1)). Each type of water treatment facility is classified as a class I, class II, class III, or class IV facility, according to the facility's characteristics. These characteristics include the number of people served, flow, water supply source, raw water quality, processes, sludge/backwash water disposal, and laboratory control.

The effect of the regulation was to reclassify these facilities in 1993. In cases in which the reclassification upgraded the facility, the regulation gave operators until February 1, 1994, to apply to the director for the issuance of an operator's licence for that type of facility (s. 8). The director issued the licence if the operator met the experience qualifications set out for that class of operator, and the operator paid a fee. Under this procedure, known as "grandparenting," an operator must write and pass an examination before the licence can be renewed. If an operator fails an examination to obtain a licence, the director issues a licence one class lower than the interim licence. All licences are for three-year terms and can be renewed only after the operator passes the examination and pays the required fee.

The regulation sets out operating standards for both the owner of the facility and the operator-in-charge. The owner of the facility, or the public utilities commission, where one has been established, must ensure that

- the operator-in-charge holds a licence applicable to that facility (s. 13);
- every operator employed in the facility holds a licence applicable to that type of facility or a licence as an operator-in-training, or is a professional engineer who has been employed in the facility for less than 6 months (s. 14);
- operators and maintenance personnel in the facility have ready access to operations and maintenance manuals sufficient for the safe and efficient operation of the facility (s. 16);
- every operator has at least 40 hours of training per year (s. 17);

- records are kept regarding information about the facility, training, and the length of time each operator works as an operator-in-charge (ss. 17(3), 18, 20); and
- ensure that records and logs are accessible in the facility for at least 2 years (s. 20(6)).

The operator-in-charge, who is responsible for the overall operation of the facility, must ensure that

- all steps reasonably necessary to operate the processes within his or her responsibility are taken in a safe and efficient manner in accordance with the relevant operations manuals;
- the processes within his or her responsibility are measured, monitored, sampled, and tested in a manner that permits them to be adjusted when necessary;
- records are maintained of all adjustments made to the processes within his or her responsibility; and
- all equipment used in the processes within his or her responsibility is properly maintained, inspected, and evaluated, and that records of equipment operating status are prepared and available at the end of every operating shift (s. 19).

### 13.3.3 The *Environmental Protection Act*

The *Environmental Protection Act*, R.S.O. 1990, c. E-19, as amended (EPA), is Ontario's principal environmental statute. The EPA prohibits the discharge of contaminants into the natural environment (s. 14), the definition of which includes water. It sets out remedial actions that provide the proper legal basis, in combination with the OWRA provisions, for actions to protect sources of water from pollution. EPA control orders (s. 7), stop orders (s. 8), and preventive orders (s.18) are similar to the OWRA orders discussed above. Remedial orders under the EPA (s. 17), which do not have a counterpart in the OWRA, can require damage to be cleaned up.

In certain circumstances, animal wastes disposed of in accordance with normal farm practices are exempt from section 14 of the EPA, which makes it illegal to discharge contaminants into the natural environment. If the only adverse effect is “impairment of the quality of the natural environment for any use that can be made of it” (s. 1(1)(a)) then the exemption applies (s. 14(2)). If there is some other effect, such as damage to health or property, then there is no exemption (ss. 1(b)–(h), 14(2)). “Normal farm practices” are not, however, defined in the EPA. What constitutes a normal farm practice is determined by the Normal Farm Practices and Procedures Board under the *Farming and Food Production and Protection Act*, S.O. 1998, c. 1.

By extension, control orders directed at farm operations are limited to cases in which there is some adverse effect beyond impairment of the quality of the natural environment. Further, farm operations are exempt from requirements relating to Certificates of Approval (s. 9(3)). Farmers are also exempt from notifying the Ministry of the Environment of contaminant discharges resulting from the disposal of animal wastes in accordance with normal farm practices where such discharges may have adverse effects (s.15(2)).

### 13.3.4 The *Environmental Bill of Rights*

The *Environmental Bill of Rights*, S.O. 1993, c. 28, as amended (EBR), sets out the ways in which citizens are to be consulted before the government makes environmental decisions and provides the means for the public to scrutinize environmental compliance. The EBR defines the environment to include water. Its purposes are:

- to protect, conserve, and, where reasonable, restore the integrity of the environment;
- to provide for the sustainability of the environment; and
- to protect the right to a healthful environment.

The EBR requires certain ministries to develop, with public participation, statements of environmental values that set out how each ministry intends to be accountable for ensuring a consideration of the environment in their decisions. It requires ministries to take reasonable steps to ensure that their statements of



environmental values are considered when they make decisions that might significantly affect the environment (s. 11).

The Ministry of the Environment statement of environmental values commits the ministry to place priority on preventing and then minimizing the creation and release of pollutants. It commits the ministry to exercise a precautionary approach: where uncertainty exists about the risk presented by particular pollutants or classes of pollutants, the ministry will exercise caution in favour of the environment. These guiding principles are to be incorporated in the ministry's internal management practices, Certificates of Approval, permits, licences, orders, Acts, regulations, and policies.

Additionally, before an action in respect of actual or imminent harm to a public resource resulting from noise, odour or dust from an agricultural operation can be taken, the plaintiff must have applied to, and had their application disposed of, by the Normal Farm Practices and Procedures Board (s. 84(4)).

### **13.3.5 The *Health Protection and Promotion Act***

The *Health Protection and Promotion Act*, R.S.O. 1990, c. H-7, as amended (HPPA), is the statutory foundation of the public health system in Ontario. The HPPA provides for the creation of public boards of health and establishes the offices of the Chief Medical Officer of Health and local Medical Officers of Health. It delineates the powers, responsibilities, and duties of each these offices and of the Ministry of Health in relation to them.

The HPPA requires that for each health unit there must be a board of health comprised of members appointed by the province and by the area municipalities (ss. 48, 49). The board of health is required to superintend, provide, or ensure the provision of mandatory public health programs and services (s. 5). This is a statutory minimum guideline for program and services, and the board normally delivers additional programs and services in response to local needs.

The HPPA empowers the Minister of Health to oversee the administration of public health in Ontario and to publish guidelines for the provision of mandatory programs and services that every board of health is required to provide (s. 7). The minister is also empowered to oversee the operation of health units and boards of health and can appoint an inspector to inspect a health unit to ascertain the extent of compliance with the Act and regulations (s. 80). He or

she may appoint an assessor to ascertain whether a board of health is providing the mandatory program and services (s. 82) and is authorized to direct a board of health to do anything if it is not complying with the legislative scheme.

Every board of health must appoint a full-time local Medical Officer of Health and may appoint one or more associate medical officers of health (s. 62). The appointment of the Medical Officer of Health or the associate medical officer of health must be approved by the Minister of Health (s. 64). The dismissal of these officers must also be approved by the Minister of Health and two thirds of the members of the board (s. 66). Finally, the Medical Officer of Health is responsible to the board for the management of public health programs and services, and the employees of the board of health are subject to the direction of and are responsible to the Medical Officer of Health in respect of their duties relating to public health (s. 67).

The HPPA contains provisions concerning the contamination of drinking water that poses a health threat. It provides that every Medical Officer of Health is required to “inspect or cause the inspection of the health unit served by him or her for the purposes of preventing, eliminating and decreasing the effects of health hazards in the health unit” (s. 10). When a complaint is made to a Medical Officer of Health that a health hazard related to occupational or environmental health exists, the officer must notify the provincial ministry with primary responsibility for the matter (s.11). The officer, in consultation with the relevant ministry, is obliged to investigate the complaint to determine whether or not the health hazard exists.

When a Medical Officer of Health or a public health inspector has reasonable or probable grounds to believe that a health hazard exists and that certain actions are needed to decrease the effect of or eliminate the health hazard, he or she may issue a written order to require any person to take or refrain from taking any action specified in the order with respect to the health hazard (s. 13). The Medical Officer of Health is required to set out the reasons for the order in that order. Where the time required to put the order in writing will or is likely to substantially increase the hazard, the officer may make the order orally and without reasons.

### 13.3.6 The *Public Utilities Act*

The *Public Utilities Act*, R.S.O. 1990, c. P-52, as amended (PUA), provides for the powers of municipalities in respect of waterworks and other utilities and their governance. A municipality may establish, maintain, and operate waterworks and may acquire, purchase, and/or expropriate land, waters and water privileges for waterworks purposes (s. 2(1)). The PUA regulates the operation of the waterworks in respect of the power to enter on lands, to expropriate, and to lay pipe (ss. 4–5). The municipality is empowered to regulate the distribution and use of the water and to fix the prices for the use of this water (s. 8). It may supply water to land outside its borders (s. 11) and pass bylaws regulating the supply of water, the price to be paid for it, and any other matter necessary to secure for the inhabitants “a continued and abundant supply of pure and wholesome water” (s. 12).

The PUA empowers the council of a municipality, with the assent of the municipal electors, to pass a bylaw establishing a public utilities commission that is entrusted to control and manage its waterworks (s. 38(1)). In January 1996, the PUA was amended so that a public utilities commission could be dissolved by repealing the bylaw without the necessity of holding a plebiscite. Upon this repeal, the control and management of the waterworks are vested in the council and the commission ceases to exist (s. 38(6)). Such a bylaw must be passed with the assent of the municipal electors (s. 45(1)). Although the PUA permits the establishment of one commission for several public utilities (s. 40(1)), separate books and accounts must be kept of the revenues for each public utility (s. 46(1)). Any excess of revenue arising from the supply of a public utility over expenditures and authorized reserves must be paid to the municipal treasurer to pay down any debt. Upon the retirement of any debt, these moneys form part of the municipality’s general revenues (s. 35).

A public utilities commission is authorized to exercise all of the powers, rights, authorities, and privileges conferred upon a municipality by the PUA while the bylaw entrusting it with control remains in force. During the life of the bylaw, the municipality may not exercise those powers, rights, authorities, and privileges. This power is, however, limited when the cost of any alterations to the works or utility services is intended to be paid out of those moneys that are required to go to the municipal treasurer (s. 41(5)). The council or the municipality must agree to these alterations.

### 13.4 The Ontario Policy Framework in May 2000

Ontario applied two main policy guidelines to decisions about drinking water protection and management: the Ontario Drinking Water Objectives (revised 1994), and the Chlorination Bulletin (Bulletin 65-W-4, “Chlorination of Potable Water Supplies,” updated March 1987).

#### 13.4.1 The *Ontario Drinking Water Objectives*, 1994

The *Ontario Drinking Water Objectives* (ODWO), a publication of the Ministry of the Environment’s Water Policy Branch, were first introduced in 1964. Before May 2000, the ODWO was revised several times. The 1994 revision of the ODWO was the applicable version at the time of the Walkerton tragedy. The ODWO was superseded by Ontario Regulation 459/00, the Drinking Water Protection Regulation, which came into effect in August 2000.

The ODWO sets out the maximum acceptable concentrations in drinking water of substances that can cause harm to human health or that may interfere with the taste, odour, or appearance of drinking water. It also sets out how and how often samples should be tested and specifies the steps to be taken when samples are above certain limits.

The ODWO contains minimum sampling requirements. In groundwater systems, weekly samples are required of raw water and of treated water at the point at which the water entered the distribution system (s. 4.1.1). For a town the size of Walkerton, 13 samples per month would be required from the distribution system for microbiological testing, including at least one sample weekly.

The ODWO sets out three circumstances that require notification of the MOE district office:

- when drinking water is judged unsafe;
- when drinking water quality is deteriorating; and
- when the microbiological maximum allowable concentrations are exceeded.

### 13.4.1.1 *Unsafe Drinking Water*

The ODWO provides that drinking water is considered to be unsafe if any of the following conditions exist:

- *Escherichia coli* (*E. coli*) and/or fecal coliforms are detected in any distribution sample by any analytical method;
- total coliforms are detected in consecutive samples from the same site or in multiple samples taken from a single submission from a distribution system; or
- in communal drinking water supplies, more than 10% of the samples (based on a minimum of ten samples per month) show the presence of coliform organisms (s. 4.1.2).

If the water contains any indicators of unsafe drinking water quality, the laboratory is required to immediately notify the Ministry of the Environment's district officer, who then immediately notifies the Medical Officer of Health and the operating authority<sup>1</sup> to initiate the collection of special samples and/or take corrective action, including disinfection and flushing (s. 4.1.3). These measures are to be taken until the objectives are no longer exceeded in consecutive samples. The ODWO provides that if satisfactory chlorine or disinfectant residuals are not detected in the affected parts of the distribution system (or if circumstances warranted it), a boil water advisory can be issued by the local Medical Officer of Health.

### 13.4.1.2 *Deteriorating Drinking Water Quality*

The ODWO provides that the following conditions are indications of deteriorating water quality:

- total coliforms detected as a single occurrence (but not *E. coli* or other fecal coliforms);

---

<sup>1</sup> The Drinking Water Protection Regulation (Ontario Regulation 459/00) contains a new notification procedure.

- samples containing more than 500 colonies per millilitre on a heterotrophic plate count (HPC) analysis;
- samples containing more than 200 background colonies on a total coliform membrane filter analysis;
- *Aeromonas spp.*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Clostridium spp.* or members of the Fecal Streptococcus (*Enterococcus*) group detected (s. 4.1.4).

When indicators of deteriorating water quality occur, the ODWO provides that the MOE district officer should be notified so that an inspection can be carried out and special samples taken. The ODWO does not indicate who is responsible for the notification or for conducting the inspection.

#### **13.4.1.3 Exceedance of Maximum Allowable Concentrations**

The ODWO requires that all public water supply systems using groundwater be sampled as set out in the Certificate of Approval (or according to a suggested minimum sampling program) for the following chemical and physical parameters:

- turbidity
- disinfectant residuals
- volatile organics
- inorganics
- nitrates/nitrites
- pesticides and PCBs

If the results show that the level for any of the above parameters exceeded its maximum acceptable concentration, immediate resampling is required. If the results from the resampling also indicate an exceedance, the Ministry of the Environment and the Ministry of Health should be notified. The ODWO does not state who is responsible for this notification.

#### **13.4.1.4 *Monitoring***

The ODWO requires continuous disinfectant residual monitoring for systems serving more than 3,300 people from surface water, or groundwater under the direct influence of surface water, and where no filtration is present (s. 4.2.1.1). As well, systems using surface water, or groundwater under the direct influence of surface water, and not performing filtration, should monitor turbidity levels, using a grab sample, every four hours by continuous monitoring.

#### **13.4.1.5 *Legal Status***

Although the ODWO were guidelines and were not legally binding in May 2000, they provided guidance to ensure that water was safe to drink. There were, however, two ways to make them legally enforceable in May 2000. First, the MOE could have made compliance with the ODWO a condition of the Certificate of Approval. Second, the ODWO or portions of them could have been made the subject of a Field Order (provincial officer's order) or a Director's Order under the OWRA and the EPA.

### **13.4.2 The Chlorination Bulletin**

Bulletin 65-W-4, updated in March, 1987 and entitled "Chlorination of Potable Water Supplies," was first introduced in the 1970s. Known as the Chlorination Bulletin, this document is a guideline for the disinfection of potable water and distribution systems. It provides detailed information about various issues, including when disinfection is required, minimum chlorine residuals, chlorination equipment, and monitoring. The Ministry of the Environment's Standards Development Branch was responsible for developing and revising the Chlorination Bulletin, which was primarily used by the ministry's Approvals Branch to determine the minimum level of treatment of a waterworks for which a Certificate of Approval was being sought. It was also used in inspections conducted by the Operations Division to assess whether the treatment process of a particular water facility was appropriate and to make recommendations if it was not.

Continuous and adequate disinfection is required in various circumstances: when the water supply is obtained from a surface source; when groundwater sources were or might become contaminated, as in fractured limestone areas;

when the supply is exposed to contamination during treatment; or when emergency conditions, such as flooding or epidemic, indicate the need (s. 1.2).

The Chlorination Bulletin sets out that at waterworks where disinfection is required, chlorine feed equipment (both gas and hypochlorite chlorinators), should be installed in duplicate to provide uninterrupted chlorination if a breakdown occurs.

Chlorine can be present in water as either a free or a combined residual. The bactericidal effectiveness of both residual forms is markedly reduced by high pH or turbidity, but it is enhanced by a higher temperature or a longer contact time. A free chlorine residual, although it is a much more effective disinfectant, readily reacts with ferrous iron, manganese, sulphides and organic material to produce compounds of no value for disinfection (s. 3.1.1).

Chlorination is required for all surface waters and many groundwaters. A total chlorine residual of at least 0.5 mg/L after 15 minutes (preferably 30 minutes) of contact time after the filter and before the first consumer is to be provided at all times. These are minimum acceptable residuals, not targets or objective residuals. The chlorine residual is to be differentiated into its free and combined portions for recording purposes, at least to get historical information and for the purposes of problem solving (s. 3.1.2). Most of the residual is to be a free residual.

The chlorine residual test must be performed as frequently as needed to ensure that an adequate chlorine residual is maintained at all times (s. 3.1.2). In groundwater sources where poor water quality and/or minimum supervision indicated a possible health hazard, there is to be an automatic chlorine residual monitor (i.e., continuous monitoring) with an alarm system (s. 2.6). As stated above, in groundwater systems under the direct influence of surface water, a town the size of Walkerton is required by the ODWO to perform continuous chlorine residual monitoring (s. 4.2.1.1). The frequency and location of chlorine residual testing is determined by the ODWO and the Chlorination Bulletin. In groundwater systems, the ODWO requires chlorine residual testing in the distribution system to be done with the same frequency as the one required for microbiological sampling (s. 4.2.1.3). (For Walkerton, the required frequency is 13 times per month, including at least one test per week). The Chlorination Bulletin requires that a chlorine residual be maintained in all parts of the distribution system (s. 3.1.2).



The Chlorination Bulletin sets out that the amount and type of chlorine residual present when routine bacteriological samples are taken should be recorded, because this allows a more complete evaluation of the condition of the distribution system. Recording this information on the laboratory submission form might facilitate the comparison (s. 3.1.2).

As was the case with the ODWO, the Chlorination Bulletin was not legally binding in May 2000 but could have been made legally enforceable through a Certificate of Approval, a Director's Order, or a Field Order.

### **13.4.3 The Drinking Water Protection Regulation**

In August 2000, following the Walkerton outbreak, the legal approach described above was altered with the passage of the Ontario Regulation 459/00, the Drinking Water Protection Regulation. As a result, the revised ODWO and Chlorination Bulletin are now contained in a document entitled "Ontario Drinking Water Standards" (ODWS) and referenced in the regulation. In considering an application for an approval, the director must now have regard to the ODWS (s. 4(2)). Although segments of the ODWS relating to sampling and analysis, standards, and indicators of adverse water quality are schedules to the new regulation, the ODWS as a whole is not part of the regulation. However, the regulation requires owners of water treatment systems to report quarterly on measures taken to comply with the regulation and the ODWS.

Sampling and analysis requirements, chemical and physical standards, indicators of adverse water quality, and corrective actions are now legally binding. The indicators of adverse water quality under the ODWS include the ODWO indicators of unsafe and deteriorating water quality. Chlorination is now mandatory for all waterworks, unless a variance is granted (ss. 5(3), 6). Waterworks must now use a laboratory that is accredited for the required analysis (s. 7). Rather than relying on a recommended minimum sampling program, the new regulation makes sampling mandatory (s. 7).

The new regulation clarifies some of the confusion regarding the notification of adverse results. It is now mandatory for a waterworks owner to ensure that notice is given both to the local Medical Officer of Health and the Ministry of the Environment's Spills Action Centre when analysis shows that a parameter has been exceeded or indicates adverse water quality (s. 8). It is also mandatory for private laboratories to give notice to the local Medical Officer of Health

and the ministry and advise the owner of adverse water quality (s. 8). Instead of simply recommending corrective action, the new regulation makes corrective action (including resampling) mandatory and outlines the appropriate corrective action to take when an indicator of adverse quality is identified (s. 9).

The regulation also introduces four new requirements. The owner of a waterworks is now required to:

- post a warning when it does not comply with the sampling and analysis requirements for microbiological parameters or when corrective actions as outlined in the regulations have not been taken (s. 10);
- make all information regarding the waterworks and the analytical results of all required samples available for the public to inspect (s. 11);
- prepare a quarterly written report to the Ministry of the Environment and to consumers of drinking water summarizing analytical results and describing the measures taken to comply with the regulation and the ODWS (s. 12); and
- submit an independent engineer's report according to the schedule contained in the regulation and to submit triennial reports thereafter (s. 13).

## **13.5 The Regulatory Review Process**

### **13.5.1 Overview**

In Chapter 10 of this report, I conclude that the government's failure to enact a regulation providing for a notification protocol at the time of the privatization of routine drinking water testing was in part related to a culture of deregulation in government in 1996; following that there was a reluctance to enact new regulations. In this section, I describe in additional detail the government initiatives that created that culture. This section is intended only to provide a background for the conclusion reached in Chapter 10. I reach no new conclusions in this section.

In the "Common Sense Revolution," the Government of Ontario made commitments to cut government barriers to job creation, investment, and economic growth. It also made a commitment to reduce the size of government

and to provide the people of Ontario with better for less. In carrying out these commitments, the new government, elected in 1995, promised to eliminate red tape and to reduce the regulatory burden for businesses and institutions. The vehicle to carry out these commitments was the Red Tape Review Commission, which subsequently became known as the Red Tape Commission. In its throne speech, on September 27, 1995, the government promised to initiate a “red tape review” of regulations affecting business and to eliminate any restrictions that could not be justified within 12 months of the review.

### **13.5.2 The Ministry of the Environment’s Regulatory Review**

In anticipation of the red tape review process, the Ministry of the Environment commenced a regulatory review on its own. In its review, the MOE assessed approximately 80 regulations for which it had statutory responsibility. The objective of the review was to bring about reforms to the MOE’s regulations that would:

- improve the efficiency and effectiveness of environmental management;
- reduce barriers to economic renewal and competitiveness;
- reduce costs to government and regulated parties; and
- improve services to MOE clients, in part by making reductions in red tape.

After consulting stakeholders, the MOE released a consultation paper in July 1996 entitled “Responsive Environmental Protection,” which concluded that Ontario needed a more responsive approach to environmental protection. That approach included the following emphases:

- focusing on environmental priorities to become more results-oriented, cost-effective, and customer-driven;
- providing the flexibility and certainty that industry needs to ensure jobs and economic growth; and
- simplifying rules and eliminating the red tape encountered by individuals, municipalities, and businesses.

Within this context, the MOE set five major directions for change:

- Focus on environment and energy priorities.
- Emphasize accountability and results.
- Simplify regulation and approvals and processes.
- Encourage continuous improvement and voluntary action.
- Ensure that regulation is clear, consistent, and current.

The fourth direction noted above related to the MOE's view that regulation was only one tool available to government to improve and protect the environment. The ministry stated that going beyond regulation meant providing incentives to achieve more than minimum regulatory requirements. It would recognize and encourage voluntarism, resource conservation, and pollution prevention by adopting new tools, including economic instruments. This direction demonstrated a strong and consistent commitment to self-regulation and industry stewardship.

### **13.5.3 The Red Tape Commission Regulatory Review**

The Red Tape Commission was established in November 1995 as a Cabinet-level committee. It is composed of members of the legislature who are not members of the Cabinet. The commission was appointed by the Premier to review the appropriateness of existing regulatory measures, especially as they affected businesses and institutions, and to make recommendations to the Cabinet concerning the elimination or amendment of any inappropriate regulatory measures. The commission was also to design an ongoing evaluation/impact test and review process for the approval of any new regulatory measures.

A regulatory measure includes all statutes and subordinate legislation and all associated administrative policy and operational processes, directives, and actions. These may include regulations, licensing, inspection, standards, compliance, enforcement, registration, permits, approvals, certifications, and other similar procedures and processes.

The objectives of the Red Tape Commission include the following:

- Ensure that all regulatory measures reflect current government goals and needs.
- Reduce government costs in administering regulatory measures.
- Reduce the compliance costs and administrative burden to businesses and institutions, thereby improving the competitiveness and business climate for existing and new businesses.
- Move toward alternative methods of regulation, such as the establishment of performance standards and allowing business self-regulation; move away from micro-managing the compliance process.
- Establish an ongoing regulatory review process that would critically evaluate all aspects of new regulations, including the cost to government, the cost to the private sector to comply, and the overall benefit.
- Change the regulatory culture of the government and the public.
- Ensure that the health and safety of Ontarians are not adversely affected by the regulatory reform process.

In 1995, the MOE Policy Development Branch had a group of 15 employees working on regulatory review. A very large majority of their time was devoted to responding to the Red Tape Commission. By the end of 1997, three or four people were working in this group; they were involved in reviewing existing regulations and did not come forward with any new regulations at the material time.

#### **13.5.4 Impact Tests for Regulatory Review**

In furtherance of the objectives of the Red Tape Commission, the government established a succession of tests to weigh the costs and benefits of regulations under review. In July 1996, the government implemented the first of its business impact tests – the Less Paper/More Jobs test – which applied a number of criteria in the review of a regulation, including the following:

- The implementation of regulatory actions was restricted to instances in which a problem required intervention.
- The Ontario government would only legislate or regulate in areas consistent with its role and priorities.
- The benefits of the policy must outweigh the risks and consequences of lack of intervention.
- The costs to government and to the affected parties should not outweigh the benefits.
- The Ontario government should explore all realistic alternatives to legislation and regulation by government.
- The need for regulations would be assessed in early and continued consultations with affected businesses, individuals, and groups.
- The paper burden and process requirements of any legislation or regulation would be streamlined, minimized, or eliminated as much as possible.
- Enforcement and compliance would be consistent with the objectives of the policy and the risks and remedies assessed for non-compliance.

This test was elaborated upon in the Red Tape Commission's final report of January 1997, *Cutting the Red Tape Barriers to Jobs and Better Government*. In the report, specific kinds of "customer" service problems were identified. A problem identified by 68% of the respondents was: "Reporting requirements are complicated, and create unnecessary paperwork." The Red Tape Commission directed 36 of its 131 recommendations to the MOE. By way of comparison, the Ministry of Labour and the Ministry of Health received 18 and 12 recommendations, respectively. The MOE received by far the greatest attention of any ministry, and the Premier testified that it was high on the priority list of the Red Tape Commission.

In respect of the process prior to proposing a new regulation, a ministry would have to consider input from stakeholders in the regulated community and justify the regulation under the business impact test. Before approving a regulation, the Cabinet would refer it to the Red Tape Commission for its review and advice. If the MOE and the Red Tape Commission disagreed about a new

regulation, each would provide its view to Cabinet for Cabinet to make the ultimate decision. The Red Tape Commission favoured regulation as a last resort.

In September 1997, the Red Tape Commission replaced the Less Paper/More Jobs test with the Regulatory Impact and Competitiveness Test (RICT), which included the following requirements:

- Explain why intervention is required.
- List the alternatives considered, including self-management, voluntary codes, and other alternatives to government regulation, and identify groups that will be affected by the proposal. In this regard, the RICT states that small business should always be considered.
- Summarize the costs and benefits to government, business, small business, institutions, and other affected parties.
- Identify whether the administrative burden of regulation will be reduced, unchanged, or increased. Factors included in administrative burden include paper burden, recognition for new technologies, time/effort/costs to comply or receive a response, degree of overlap or duplication with other ministries, other levels of government, and clarity of communication.
- Identify the impact of Ontario's competitiveness as improved, unchanged, or decreased.
- Describe the means of the ongoing review of the legislation, regulation, or policy.

