DRINKING WATER OFFICERS' GUIDE:

PART A

LEGISLATIVE REQUIREMENTS

CONTENTS

Chapter 1: Roles and Responsibilities

There are a number of persons or agencies involved with or interested in the administration of the Act. These entities, and their respective roles and responsibilities regarding drinking water protection, are set out below.

1.1 Health Authorities

The five regional health authorities established under the *Health Authorities Act* are responsible for the implementation of most aspects of the *Drinking Water Protection Act*. In particular, the regional health authorities employ the drinking water officers who are the statutory officials that hold responsibility for most of the powers and functions under the Act.[1] The health authorities also employ other officials to whom the powers of drinking water officers may be delegated. This may include, for example, medical health officers, public health inspectors, environmental health officers and public health engineers.

1.2 Drinking water officers and delegates

Most of the discretionary decision-making power in the Act is provided to drinking water officers. Drinking water officers are appointed under section 3 of the Act. There may be one or more drinking water officers in each health authority.

[1] A few powers and functions are held by the minister and the provincial health officer, as discussed later, but these do not relate to the day-to-day administration of the act.

Drinking waters officers can, in writing, delegate any or all of their powers to other persons under section 3(4). [2] Unlike some other acts, there is no provision in the Act that allows for delegation "on terms and conditions".

Powers of drinking water officers may be delegated to officials employed as medical health officers, public health inspectors, environmental health officers, public health engineers and other officials. Delegation of specific powers may also be made to officials from other ministries and other individuals.

Before delegating powers under the Act, drinking water officers should be satisfied that the person to whom the delegation is provided has the appropriate skills, training and judgment to exercise the powers of drinking water officers in relation to the matters being delegated. They should also ensure that the person being delegated authority is provided with a copy of this Guide.

A sample form of delegation is set out in appendix 1.

Any person who has been delegated the authority of a drinking water officer should be able to provide proof of that delegation if requested to do so.

1.2.1 Relationship between appointed and delegated drinking water officer functions

A person who has been delegated the powers of a drinking water officer holds those powers in the very same way as the person who delegated those powers. In other words, the delegated official has the same powers as a drinking water officer in respect of the matters delegated and is as much a statutory official as the drinking water officer himself or herself. [3]

[2] The ability to delegate does not apply to the issuance of construction permits, although drinking water officers can designate public health engineers to do this. This is discussed further below.

[3] One exception is that a person who has been delegated the powers of a drinking water officer does not have the ability to further delegate those powers to other persons. In other words, delegation can only be undertaken by a person who is actually appointed as a drinking water officer under section 3 of the Act.

Accordingly, references to the powers and functions of a drinking water officer in this Guide should be taken to include any person who has been delegated the relevant powers of a drinking water officer, unless expressly noted otherwise.

Only persons who have been named or appointed as a drinking water officer should use that title to describe themselves. Persons who have been delegated the powers of a drinking water officer should not use that title, but be aware that they hold the relevant powers of a drinking water officer under the Act in any case where it is necessary to exercise those powers.

1.2.2 Relationship to other officials and managers within a health authority

Because the health authorities employ drinking water officers, they are responsible for their overall management, performance monitoring, and similar matters. Health authorities are also responsible for providing overall operational policy guidance to drinking water officers and their delegates. However, drinking water officers and their delegates cannot be directed by any officials within the health authority in the exercise of their statutory discretion in particular cases. Similarly, their decisions cannot be modified by other officials (except as provided for under section 39.1, discussed later). Drinking water officers are, however, encouraged to consult with medical health officers and other officials when appropriate, as discussed further throughout this Guide.

Where a drinking water officer has delegated authority to another person, the drinking water officer does not have the ability to direct the delegate in the exercise of discretion in that particular case. The delegated official may consult with the drinking water officer, but the decision as to how to proceed must be made by the delegated official (unless the drinking water officer himself or herself assumes full responsibility for the file).

In some cases, exercise of discretion by drinking water officers or delegates may have implications for the health authority (e.g., a decision to take direct action to address a threat to drinking water and then seek cost recovery from the owner if possible). Drinking water officers

and their delegates should discuss such matters with the appropriate senior manager[4] of the health authority. In addition, there are a number of other specific circumstances for which this Guide recommends such consultation. In all cases where consultation with a senior manager occurs, the final authority for the exercise of statutory authority rests with the drinking water officer or delegate.

1.2.3 Relationship to officials from other agencies or authorities

It may be appropriate for a drinking water officer to consult with officials from other agencies, organizations and governments in the discharge of responsibilities of the drinking water officer under the *Drinking Water Protection Act*. The requirements and limitations respecting such consultations are discussed in various sections of this Guide as it relates to specific issues.

Drinking water officers may be consulted by other officials in the exercise of statutory decision-making under other acts, for example as "referrals", or "requests for comments". Where these practices occur, drinking water officers must clearly respect the distinction between comment or review functions and the exercise of statutory responsibilities under the *Drinking Water Protection Act*. They must ensure that any comments they provide to other agencies would not be seen as fettering or biasing their decision under the *Drinking Water Protection Act* in relation to matters that may come before the drinking water officer in due course.

1.3 Issuing officials

Under the Act, construction permits and operating permits may be issued by "issuing officials". The Act and regulations specify who can be an issuing official for each type of permit, and this is discussed in more detail below. In sum, construction permits will generally be issued by public health engineers, and operating permits will be issued by drinking water officers or their

[4] This Guide will make reference to the generic title of "senior manager" throughout. Organizational structure of health authorities differs across regions and the "senior manager" may have a different title depending on the health authority.

delegates, and these two types of issuing officials should work together to coordinate their respective roles and responsibilities.

1.4 Minister of Health

The Minister of Health is responsible to the government and the Legislature for the overall administration of the Act and Regulation. This includes a general role in overseeing the implementation and administration of the Act by the regional health authorities.

The minister also has a number of specific statutory powers and functions under the Act. These include:

- Power to appoint drinking water officers (section 3(2))
- Power to issue guidelines and directives (section 4)
- Requirement to advise Cabinet of problems that cannot be remedied to the satisfaction of the provincial health officer (section 4.2(2))
- Ability to establish advisory committees (section 5)
- Ability to prescribe areas where other statutory decision makers must consult drinking water officers (if Cabinet enables this by Regulation) (section 30)
- Ability to designate an area for development of a drinking water protection plan, establish a process for those plans, and perform various related functions (Part 5)

Ministry officials also provide informal coordination and support functions to the health authorities, but have no formal oversight or operational role as it relates to health authorities and drinking water officers.

More generally, the Ministry has entered into agreements that set out the objectives and expectations for the provision of health services by regional health authorities. The Ministry also provides funding to the health authorities for matters that include, but are not limited to, public health programs such as drinking water protection.

1.5 Provincial health officer

1.5.1 Advisory and reporting functions

Part 6, Division 2 of the *Public Health Act* provides:

64 The provincial health officer is the senior public health official for British Columbia.

66 (1) The provincial health officer must monitor the health of the population of British Columbia and advise, in an independent manner, the minister and public officials

(a) on public health issues, including health promotion and health protection,

(b) on the need for legislation, policies and practices respecting those issues, and

(c) on any matter arising from the exercise of the provincial health officer's powers or performance of his or her duties under this or any other enactment.

(2) If the provincial health officer believes it would be in the public interest to make a report to the public on a matter described in subsection (1), the provincial health officer must make the report to the extent and in the manner that the provincial health officer believes will best serve the public interest.

(3) The provincial health officer must report to the minister at least once each year on

(a) the health of the population of British Columbia, and

(b) the extent to which population health targets established by the government, if any, have been achieved,

and may include recommendations relevant to health promotion and health protection.

(4) The minister must lay each report received under subsection (3) before the Legislative Assembly as soon as it is reasonably practical.

The provincial health officer's general advisory function under this section extends to matters falling under the *Drinking Water Protection Act*.

1.5.2 Supervisions and direction to medical health officers

The provincial health officer plays a formal role in the supervision of actions by medical health officers across the province. Specifically, Part 6, Division 2 of the *Public Health Act* states:

67 (1) The provincial health officer may exercise a power or perform a duty of a medical health officer under this or any other enactment, if the provincial health officer

(a) reasonably believes that it is in the public interest to do so because

(i) the matter extends beyond the authority of one or more medical health officers and coordinated action is needed, or

(ii) the actions of a medical health officer have not been adequate or appropriate in the circumstances, and

(b) provides notice to each medical health officer who would otherwise have authority to act.

(2) During an emergency under Part 5 *[Emergency Powers]*, the provincial health officer may exercise a power or perform a duty of a health officer under this or any other enactment, and, for this purpose, subsection (1) does not apply.

(3) If the provincial health officer acts under subsection (1), the provincial health officer may order a health authority to assist the provincial health officer, and the health authority must ensure that its employees and appointees comply with the order.

(4) For the purposes of exercising a power or performing a duty under this or any other enactment, the provincial health officer may exercise a power of inspection that a health officer may exercise under this Act, and, for this purpose, Division 1 *[Inspections]* of Part 4 applies.

68 (1) The provincial health officer may establish standards of practice for medical health officers in relation to the exercise of their powers and the performance of their duties under this or any other enactment.

(2) Without limiting subsection (1), a standard may include a requirement to make a report or take an action in addition to a requirement of this or any other enactment.

(3) The provincial health officer must

(a) monitor the performance of medical health officers for compliance with established standards, and

(b) conduct performance reviews of medical health officers in accordance with an order of the minister made under section 63 *[power to establish directives and standards]*.

(4) The provincial health officer

(a) must disclose the results of a performance review to the medical health officer and the medical health officer's employer, and

(b) may disclose the results of a performance review to the minister and the Lieutenant Governor in Council.

The provincial health officer does not have authority to direct the actions of drinking water officers or the medical health officers under the *Drinking Water Protection Act*. The one exception is the case in which a water supplier requests a review of a decision under the *Drinking Water Protection Act*:

39.1 (4) If a review is requested,

(a) the review is to be conducted by the Provincial health officer or a medical health officer designated by the Provincial Health officer,

(b) the review is to be a review based on the record,

(c) the person conducting the review may require the applicant to give notice of the review in accordance with the person's directions, and

(d) the person conducting the review may

(i) confirm, vary or reverse the initial decision, or

(ii) refer the matter back to the drinking water officer, with or without directions.

For more information about this situation, go to Part 5, section 5.1.2 of this Guide.

1.5.3 Specific functions under the Act

The provincial health officer also has several specific powers and functions under the *Drinking Water Protection Act*. These include:

- Advises minister on qualifications of drinking water officers (3(3))
- Must monitor drinking water officer compliance with ministerial guidelines and directives. (section 4(2))
- Prepares annual report respecting activities under the Act (section 4.1)
- Must advise minister of government action or inaction that significantly impedes protection of public health regarding drinking water (section 4.2)
- If a problem under section 4.2 cannot be resolved to the satisfaction of the provincial health officer then the minister must take it to Cabinet.
- Role in initiating drinking water protection plans (section 31)
- Advises minister in the establishment of advisory committees (section 5)

The office of the provincial health officer also employs a person in a position of "Provincial Drinking Water Officer". This position does not hold any statutory functions under the Act, but is intended to facilitate consultation, cooperation and leadership among the interested parties, particularly as it relates to the role of the provincial health officer, and to support the provincial health officer in fulfilling his mandate under the Act.

1.6 Drinking Water Leadership Council

Recognizing that the health authorities, the ministry, and the provincial health officer all play important roles in the administration of the *Drinking Water Protection Act*, a Drinking Water Leadership Council has been established to coordinate discussions and foster cooperation among these agencies.

The Drinking Water Leadership Council may include representation from other government ministries that have authority for various regulatory regimes affecting drinking water.

1.7 Advisory Committees

Under section 5 of the Act, the minister can establish technical advisory committees to consider matters referred to it by the minister. The ministry draws upon the technical knowledge and expertise of various officials and organizations through informal committee consultations.

1.8 Laboratories

Water suppliers are required to have their bacteriological water monitoring analyses undertaken by laboratories approved by the provincial health officer. These can be found on the website of the Provincial Health Services Authority (PHSA) at http://www.phsa.ca/NR/rdonlyres/5B077C99-9015-42AC-943F-32F74E9968B6/0/831PHOApprovedLaboratoryList20110615.pdf

Testing for other parameters (chemical and physical) can be undertaken at any appropriate laboratory. Although there is no legal requirement in the Act or Regulation for any approval or certification of laboratories in respect of these parameters, some labs are voluntarily certified by the Canadian Association for Laboratory Certification in respect of specific testing. See www.cala.ca

1.9 Environmental Operator's Certification Program

Certain types of water suppliers must meet the qualification requirements set out in section 12 of the Regulation, which refers to classification and certification by the Environmental Operator's Certification Program (EOCP).

The EOCP is a society, established under the *Society Act*. It classifies drinking water and waste water treatment facilities, and collection and distribution systems. The EOCP facility classification determines the level of the senior operator required for operating the facility and the EOCP certifies operators to meet classification requirements. It does not have any regulatory powers and cannot impose legally binding requirements on any party. However, classification of

facilities and operator certification by the EOCP are required to meet the requirements of section 12 of the Regulation (as applicable). The EOCP does not offer operator courses, but provides accreditation of courses and training programs to assist in obtaining certification under the EOCP. Those programs are delivered by other organizations (see 1.10 of this guide for more information).

For more information about requirements regarding operator training and accreditation see section 3.2.6.1 of this guide. For information related specifically to small water systems, see section 3.2.6.2 of this guide. The EOCP provides more detailed information on its web site at http://www.eocp.org/.

1.10 Operator Trainers

Several organizations and individuals offer EOCP accredited courses and programs. The EOCP established an online training registry to help connect operator trainers with people seeking training in nearby communities. The registry is designed to encourage those who have valuable skills to register as trainers, and allow those seeking to learn about specific skills find training closer to where they work and live. This will make it easier to earn continuing education units towards EOCP certification, and save money in travel.

For more information contact the EOCP at http://www.trainingregistry.eocp.ca/.

Chapter 2: Scope of the Act

2.1 Who and what is covered?

One of the fundamental questions to arise in administration of the Act is, "Which persons or types of systems are covered by the Act and Regulation"? There is no single and simple answer to this, as there may be a number of persons responsible under the Act in relation to a water supply system, and there are various provisions that may impose different obligations on parties, even if they are not water suppliers.[5] It is therefore always necessary to carefully review potentially relevant sections of the Act, and all related definitions, before deciding whether the Act imposes obligations on a person or in respect of a particular system.

Most of the provisions of the Act deal with "water suppliers" and "water supply systems". To understand what these terms mean, it is necessary to consider a number of related definitions. These are set out below. Where a term that is used in a definition is itself defined by the Act or Regulation, this is noted by way of underlining, and the definition of the term is, in turn, discussed further below.

Water Supplier

an owner of a water supply system (See Act .s 1)

Owner

Includes[6]:

[5] For example, under section 23 of the Act, all persons are prohibited from contaminating drinking water or tampering with water supply systems, and under section 25 hazard abatement orders can be made against persons other than water suppliers in appropriate cases.

[6] See Act, section 1. The term owner is defined to "include" these persons but is not necessarily limited to them. Part Four, section 3.1of this Guide provides additional information and guidance for cases where it is not readily apparent who the owner of a system is.

(a) a person who is

(i) responsible for the ongoing operation of the water supply system or

(ii) in charge of managing that operation, and

if

(i) parts of the water supply system are owned by different persons, or

(ii) all or parts of the system is jointly owned by different persons,

all of those persons

Water Supply System

A domestic water system, other than:

(a) a domestic system that serves only one single-family residence[7]

[7] The term "single-family residence" is not defined in the Act. As such, it should be given its plain meaning and taken to mean any residence where not more than a single family resides. For example, two family residences, bed and breakfasts, seasonal accommodation for labourers, residences with guest houses and outbuildings would likely fall outside the term "single-family residence". In general, community care facilities would also fall outside the term "single-family residence". However, this is subject to section 20 of the *Community Care and Assisted Living Act*, which states:

(1) This section applies to a community care facility
(a) for which a license has been issued,
(b) is being, or is to be, used
(i) as a day care for no more than 8 persons in care, or
(ii) as a residence for no more than 10 persons, not more than 6 of whom are persons in care
(c) from which, in the event of a fire, persons in care can safely exit unaided or be removed by its staff, and
(d) that complies with all enactments of British Columbia and the municipality where the community care facility is located that relate to fire and health respecting a single family dwelling house
(2) A provision in an enactment of British Columbia, other than this Act, or of a municipality, does not apply to the community care facility described in subsection (1) if that provision would
(a) limit the number of persons in care who may be accepted or accommodated at the community care facility
(b) limit the types of care that may be provided to persons in care at the community care facility, or
(c) apply to the community care facility only because
(i) it is not being used as a single family dwelling house, or
(ii) it operates as a community care facility, a charitable enterprise or a commercial venture.

(Even if a system is deemed to serve a "single-family residence" by virtue of section 20 of the *Community Care and Assisted Living Act* (and thus not a "water supply system" under the *Drinking Water Protection* Act) it would still be subject to any other applicable public health laws.)

(b) equipment, works or facilities prescribed by regulation as being excluded (as noted below in Domestic Water System)

(See Act, section 1)

Domestic Water System

A system by which water is provided or offered[8] for domestic purposes, including:

(a) works used to obtain intake water,

(b) equipment, works and facilities used for treatment, diversion, storage, pumping, transmission and distribution,

(c) any other equipment, works or facilities prescribed by regulation has been included[9]

(d) a tank truck, vehicle water tank or other prescribed means of transporting drinking water, whether or not there are any related works or facilities, and

(e) the intake water and the water in the system

(see *Act*, section 1)

The following are excluded from the definition of "domestic water system" in the Act:

(a) equipment, works and facilities constructed, operated or maintained

(i) under a license, as defined in the *Water Act*, for conservation, power or storage purposes,

(ii) under a permit issued under the *Water Act*, [10]

(iii) for bottled water production or distribution, [11] or

(iv) for drinking water dispensing machines; [12]

[8] In deciding whether water is "provided or offered" it is necessary to consider all the circumstances of a particular case. A person who makes water available for domestic use, but purports to not be doing so may still fall within this definition. Each case will have to be considered on its own facts, having regard to the plain meaning of these terms and the underlying intent of the act. If questions arise in this regard, it may be appropriate to seek legal advice.

[9] None at present.

[10] Permits are issued under the *Water Act* to construct, maintain or operate works on Crown land. This exemption from the definition of "water supply system" applies only to such equipment, works and facilities. This is different than systems that are licensed under the *Water Act* to obtain water from a particular source. Systems that draw water from a source licensed under the *Water Act* are not exempt from the definition of "water supply system".

[11] These systems may still be subject to the *Food Safety Act*, as well as applicable federal laws.

(b) a reservoir relating to a license or permit referred to in paragraph (a);

(c) a building system[13]

(d) a system within a system[14].

(see Regulation, section 3)

Domestic Purposes

the use of water for

(a) human consumption, food preparation or sanitation,

(b) household purposes not covered by paragraph (a), or

(c) other prescribed purposes[1516]

Given these interrelated and very specific definitions, it is important to carefully consider each of these provisions in assessing whether or not a person or system is subject to the provisions of the Act.

A person will not be considered to fall within or outside the Act simply by virtue of their status under other legislation (e.g. holders of water licenses under the *Water Act*, or water utilities under the *Water Utility Act*). However, these may be relevant factors in assessing whether they are owners of a water supply system.

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[12] These systems may still be subject to the *Food Safety Act*, as well as applicable federal laws.

[13] The term "building system" is defined in section 1 of the Regulation to mean "a system, within a building, to which the British Columbia Plumbing Code applies, that receives water from a water supply system operating under a valid operating permit under the act."

[14] This term is defined in section 1 of the Regulation to mean "a water supply system that, in the opinion of a drinking water officer or issuing official,
(a) redistributes water from a water supply system operating under a valid operating permit under the Act, and
(b) does not require further treatment processes, additional infrastructure or ongoing maintenance to prevent a drinking water health hazard. "
Further guidance on systems in systems is provided in section 5.5.1 and Part B of this Guide

[15] Systems supplying water (potable or non-potable) solely for use in toilets would generally fall within the definition of a "domestic water system." Such systems are generally still subject to the requirements of the act unless section 3.1. of the regulation applies. Section 3.1 of the regulation provides an exemption to the potability requirement under section 6 of the act. A domestic water system exempted from section 6 of the act is still subject to all other sections of the act, including sections 7 and 8 pertaining to construction and operating permits.

[16] Guidance on the determination of whether water for class D&E slaughter facilities is used for domestic purposes can be found in Part B: *Water Systems For Class D & E Slaughter Establishments And Other Unregulated Uses* of this Guide.

There is no specific limitation on the type of entities that can be water suppliers. They might include individuals, partnerships, corporations, societies, improvement districts, utilities, water users communities, local government or any other entity that falls within the above noted definitions.

It will be apparent that the determination of whether a person is an "owner" may be a complex question that varies on the circumstances of individual cases, and that it may have important consequences. Consequently, legal counsel should be consulted in cases where staff are unclear who should be considered "owners" of a water supply system.

2.1.1 Application of the Act to other persons

Although most of the provisions of the Act relate primarily to water suppliers, the Act's scope is broader. For example, many of the remedial actions discussed in Chapter 4, section 4.3 of this Guide, such as the power to issue hazard abatement and prevention orders, are not limited to orders made to water suppliers. Similarly, section 23 of the Act contains broad prohibitions against contaminating drinking water or tampering with a water system, and these provisions are not limited to water suppliers.[17] Drinking water officers must ensure that they are aware of and fully consider all of the options available under the Act to address drinking water problems.

2.2 What is a water supplier required to do?

The following comments provide a basic summary of the obligations imposed on water suppliers by the Act and Regulation. References are made to the relevant sections of the Act and Regulation, and these sections should be consulted to determine the specific nature and extent of obligations imposed.

[17] According to subsection 3, these prohibitions do not apply to activities that are authorized or required by or under any other enactment or the person is otherwise acting with lawful authority. In such circumstances, a person cannot be charged for an offence. However, all other aspects of the *Drinking Water Protection Act* continue to apply to problems even if they arise from activities authorized under another act. This includes the power to issue hazard prevention and abatement orders under section 25.

In some cases, the relevant sections of the Act impose requirements only on "prescribed" water supply systems, meaning those specified as such in the Regulation. The Regulation provides (in section 4) that all water supply systems are prescribed as being covered by the requirements of sections 8, 10 11 and 22(1)(b) of the Act, and all systems except "small systems"[18] are prescribed for the purposes of section 9 of the Act.

Potable water

All water suppliers must supply water which is potable and meets any requirements set out in the operating permit or regulations. "Potable" is defined in section 1 to mean

(a) meets the standards prescribed by regulations, and

(b) is safe to drink and fit for domestic purposes without further treatment

The Regulation also requires all surface water to be "disinfected"[19]. Unlike the former Safe Drinking Water Regulation under the old *Health Act*, there is no discretion to exempt water suppliers from this requirement. (See Act, section 1 and 6, Regulation, section 5)

Exception: A system is not required to meet the potability requirements if the system does not provide water for human consumption or food preparation[20,21] and is not connected to a system

[18] Section 1 of the Regulation defines "small system" to mean all water supply systems that serve up to 500 individuals during any 24-hour period

[19] The term "disinfect" is not defined in the Act or Regulation. It is referred to in section 5(2) of the Regulation.

A drinking water officer may impose specified disinfection requirements as terms and conditions of an operating permit, as discussed below in Part 3, section 2.6. However, even in the absence of any such terms and conditions, the requirement to disinfect surface water applies to all water suppliers.

For reference sources concerning the term "disinfect", see the US Environmental Protection Agency EPA website at http://epa.gov

[20] Guidance on the determination of whether water for class D&E slaughter facilities is used for domestic purposes can be found in Part B: Water Systems For Class D & E Slaughter Establishments And Other Unregulated Uses of this guide.

[21] The term "human consumption" is not defined in the Act. It must be given its plain meaning and applied to the facts of each case. In general, this would likely mean water that is used for purposes of ingestion (drinking, ice, cooking etc.) and would not include water used solely for washing and bathing (although there may be some cases where this is less clear, such as washing facilities to be used by toddlers). Similarly, the term "food preparation" is not defined in the Act. It must also be given its plain meaning and applied to the facts of each case. In general, water used for washing food before consumption, or for adding to food for the purposes of consumption, would be considered water used for "food preparation". If drinking water officials have any question concerning the application of these terms to the facts of a particular case, they should consult legal counsel.

that does. "Small systems" are not required to meet the potability requirement if each recipient of water from the system has a Point-of-Entry or Point-of-Use treatment system[22] that makes the water potable. In each of these circumstances, the water supplier must ensure that the location of non-potable discharge and non-potable water piping are identified by markings that are permanent, distinct and easily recognized. (See Act section 1 and 6 and Regulation section 1 and 3.1)

Construction permits

Persons may only construct a water supply system if they obtain a construction permit in advance. (See Act section 7 and Regulation section 6)

Exception: for "small systems" the requirement for a construction permit may be waived (with or without conditions) by an issuing official. (See Regulation section 6(3)(c))

Operating permits

Water suppliers must not operate a water supply system without an operating permit and must comply with the terms and conditions of the permit. (See Act section 8 and Regulation section 7)

Operator Training

Persons must not operate a water supply system unless they meet the operator training and certification requirements set out in the regulation. (See Act section 9, Regulation section 12)

[22] Neither the Act nor the Regulation define what is a "Point-of-Entry " or "Point-of-Use" treatment system. For the purposes of this guide, a Point-of-Entry (POE) treatment device is taken to mean a treatment device applied to the drinking water entering a house or building for the purpose of making the water distributed throughout the house or building potable. A Point-of-Use (POU) treatment is taken to mean a treatment device applied to a single tap for the purpose of making the water distributed by that tap as potable when it leaves the tap. (For this reason, a kettle that may be used to boil water would not be considered a Point-of-Use device, even if boiling water can address certain threats to drinking water.) See Part B: *Obligations of the Water Suppliers of Drinking Water Treatment Systems that have Point of Use/Point of Entry Devices* of this Guide for more information about this exception.

Exception: "small systems" are not required to meet any operator training and certification requirements unless their operating permit so specifies. (See Regulation section 4(2))

Emergency response and contingency plans

Water suppliers must have written emergency response and contingency plans[23] (See Act section 10, Regulation section 13)

Monitoring

Water suppliers must engage in sample monitoring as required by the regulations, operating permit and directions of a drinking water officer (See Act section 11, Regulation section 8). This includes monitoring for total coliform and, effective April 1, 2006, *Escherichia coli*.

Laboratory reports

Laboratories must immediately report to water suppliers, the drinking water officer and the medical health officer if test results respecting *E*-coli and fecal coliform do not meet specified standards. Laboratories must also advise drinking water officers of other information if the drinking water officer so requests. Water suppliers must immediately advise the drinking water officer that they have been notified by the labs in such cases. (See Act section 12, Regulation section 9)

Notifying drinking water officer of threats

Water suppliers must immediately notify the drinking water officer of other threats to drinking water if they become aware of them. (See Act, section 13)

[23] Samples and guides respecting Emergency Response and Contingency Plans for small systems are set out in appendix 2.

Public notice of threats

Water suppliers must provide public notice of threats to drinking water if requested by a drinking water officer. (See Act section 14, Regulation section 10)

Also, if a laboratory advises that an immediate reporting requirement exists, or the supplier is otherwise aware of a potential drinking water health hazard, and the drinking water officer cannot be immediately contacted, the water supplier must notify the users of the water supply system immediately, in accordance with emergency response and contingency plans. In this case, no request or order from a drinking water officer is required. (See Act section 14, Regulation section 10)

Publication of other information

Water suppliers are required to make various other types of information public in accordance with the regulations and requirements of the drinking water officer. This includes information regarding emergency response plans and contingency plans[24], an annual report of monitoring[25], and information concerning assessments. (See Act section 15, Regulation section 11).

Flood-proofing of wells

Owners and operators of wells must flood proof them if required by the regulations.[26] (See Act section 16, Regulation section 14)

Assessments

Water suppliers must conduct water source and system assessments of water supply systems, if required by the regulations or a drinking water officer (See Act, section 19).

[24] A sample form of an Emergency Response and Contingency Plan is set out in appendix 2.
[25] A sample form of an Annual Report of Monitoring is set out in appendix 3.
[26] Applies only to wells identified through an assessment as being at risk of flooding.

Assessment Response Plans

In response to an assessment, the drinking water officer may make changes to the terms and conditions of the operating permit as well as order the water supplier to prepare an assessment response plan. The purpose of an assessment response plan is to identify the measures that may reasonably be taken to address identified threats (e.g., cross connection) to the drinking water that is provided by the water supply system (see Act, section 22).

Drinking Water Protection Plan

If directed by a drinking water officer, a water supplier is required to participate in the development of a drinking water protection plan. (See Act section 33(1)(a)).

Other

In various other circumstances, drinking water officers have the ability to make requests or orders and impose requirements on water suppliers under the Act. Water suppliers must comply with those requests, orders and requirements.

2.2.1 Best practice tools and reference documents for water suppliers

Although there are specific legal obligations set out in the Act, Regulation, permits and other orders or requests of drinking water officers, these instruments will not provide specific direction in respect of every matter that a water supplier may encounter in the day-to-day operations of a water supply system. However, a number of best practices and reference documents have been developed or identified that may assist water suppliers in this regard. These are set out in appendix 4. Drinking water officers are encouraged to bring these best practices documents to the attention of water suppliers and other interested persons, with the caveat that they are not legally binding and, in the event of inconsistency between those documents and the Act, Regulation, permits, or any direction of the drinking water officer, the best practices documents must give way to the legally binding requirements.

Chapter 3: Construction and Operating Permits

3.1 Construction permits

Section 7(1) of the Act requires a person to obtain a construction permit for the construction, installation, alteration or extension of:

> (a) a water supply system, or
>
> (b) works, facilities or equipment that are intended to be a water supply system or part of a water supply system.

The requirement for construction permits is not limited to new systems. Any time a construction permit is requested – whether for the construction or installation of a new system, or the extension or alteration of an existing system – all the requirements of section 7 apply.

3.1.1 The issuing official

Section 6(1) of the Regulation specifies the following persons are issuing officials for the purposes of construction permits:

> (a) a drinking water officer who is a professional engineer, or who is working under the direction of a professional engineer;
>
> (b) a professional engineer who has been approved by a drinking water officer

It is only these people who can issue construction permits or, in the case of a small system, waive the requirement for one.

If a health authority wishes to ensure that only persons appointed as drinking water officers (and not their delegates) have the power to approve engineers for this purpose, then any delegation of

drinking water officer powers should specifically exclude the power to approve engineers under section 6(1)(b) of the Regulation.

Professional engineers who have been designated as issuing officials must not consider applications for construction permits in respect of systems that they themselves have designed or would install.

3.1.2 Construction Permit Waivers for small systems

Under section 6(3)(c) of the Regulation, an issuing official may waive the requirement for a construction permit in the case of a small system. In deciding whether to waive the requirement for a construction permit, the issuing official should consider whether and to what extent a construction permit is necessary to address potential threat to public health. This should include consideration of all relevant information including:

- The nature and complexity of the proposed system
- The source of water that will be used by the system, and the potential for risks to arise in relation to it that would require addressing with specialized equipment or construction practices
- The likelihood that the applicant is prepared to accommodate suggestions or requests of the issuing official in the absence of any formal legal requirement for approval of a construction permit
- The knowledge and experience of the people undertaking the construction
- In the case of systems using Point-of-Entry or Point-of-Use treatment, whether the issuing official believes it is necessary to impose conditions respecting construction, design or equipment to provide reasonable confidence that the POE / POU devices will be able to provide potable water, and where such conditions could not likely be addressed through an operating permit.

The issuing official responsible for issuing the construction permit is often not the drinking water officer responsible for issuing the operating permit or conducting field inspections. For such circumstances, the issuing official responsible for issuing the construction permit should consider consulting with his or her operating permit counterpart to obtain his or her views on the request for a waiver. Should the information obtained from the issuing official responsible for issuing the

operating permit have the potential to negatively impact the person's waiver request, it should be shared with the applicant for comment before a decision is made about whether to issue a waiver.

In general, if an applicant is prepared to construct a relatively simple system and there are no significant reasons why a construction permit is required, then it may be appropriate to provide a waiver. However, this is a matter that is solely within the discretion of the issuing official, who must exercise discretion on a case by case basis. There is no reason to provide or deny an applicant a waiver solely because of how another person's waiver request was decided.

Even in cases where the waiver request is denied, the issuing official has considerable discretion to determine the form of application and supporting information required to obtain a construction permit. This discretion can be used to make the construction permit application process as efficient and practical as possible (as discussed below).

3.1.3 Submission of applications

Applications for construction permits must be made to the issuing official "in a form satisfactory to the issuing official" (Regulation section 6(2)). Appendix 5 sets out a sample application form and related instructions that may be used by applicants. Health Authorities may wish to use these forms, or to replace them with standard forms for use within their authority.

Issuing officials have discretion to permit other forms of applications where they consider that appropriate. For example, if a person has prepared relevant construction information and drawings as part of an application for a water utility, that information could be used in support of an application for construction permit if and to the extent an issuing official considers appropriate.

Similarly, the scope and detail required in drawings or plans submitted as part of a construction permit might also appropriately vary depending on the nature, size and complexity of a proposed system. Applicants should therefore be encouraged to discuss these matters with the issuing official before submitting their application. This will ensure that issuing official receive the

information they consider necessary in the circumstances, without requiring the applicant to incur unnecessary effort or expense.

Where a person applies for a construction permit after construction has already commenced, the principles set out in Chapter 4, section 4.3.13.3 of the guide should be applied.

3.1.4 Confirming a responsible person

Before issuing a construction permit, the issuing official should ensure that an owner has been identified as being responsible for the water supply system (See Act, section 7(4)). The person responsible for the ongoing operation may or may not be the same as the person who is identified on the application as the "owner", and there may be more than one "owner" of a system, as that term is defined in section 1 of the Act. For example, if a municipality is applying for a construction permit, the permit may be requested in the name of the municipality, but the person responsible for the ongoing operation of the system may be the senior operator with direct responsible charge.

Generally, the responsible person should be one who will have the authority and resources to manage the system; they may also operate the system on a general basis. The information required in this regard may vary, depending on whether the owner will be a natural person, a company, a society, etc. Some common situations, and the information that may be appropriate to request in relation to each, are set out below.

<u>Applications by or on behalf of individuals</u>

- Clarification of the person who proposes to be the principal responsible person, as well as the name of all other persons who will be "owners" as defined in section 1 of the Act

<u>Applications by or on behalf of local governments</u>

- Confirmation of the authority of the person making the application on behalf of the local government

<u>Applications by or on behalf of partnerships</u>

- Copies of any certificates or registration statements filed by the partnership with the Corporate Registry (BC Registry Services), and any acknowledgements by the Corporate Registry.
- Confirmation of the authority of the person making the application on behalf of the partnership

Applications by or on behalf of corporations established under the BC *Business Corporations Act*[27] or the *Canada Business Corporations Act*,

- Copy of the company's certificate of incorporation
- Confirmation of authority by the corporation to make application for permit on its behalf

Applications by or on behalf of societies established under the *Society Act*

- Copy of society's certificate of incorporation
- Confirmation of authority by the society to make application for permit on its behalf

Applications by or on behalf of water users communities established under section 51 of the *Water Act*

- The incorporation records of the water users community,
- The name of the manager, the committee of management, and all members of the water users community

The person designated as having primary responsibility for the ongoing operation of the system may not be the only "owner" of the system. The term "owner" is defined broadly in section 1 of the Act to "include" specified persons; it is not limited to them. As such, issuing officials should be careful to ensure that no assurances are made that limit which persons may be considered an "owner".

If the issuing official is not satisfied that the applicant has identified an owner of the water system that will be responsible for the ongoing operation of the system, the issuing official should refuse to issue the permit, as contemplated by section 7(4) of the Act.

[27] The BC *Business Corporations Act* replaced the BC *Company Act* in 2004. The BC *Company Act* was repealed at the same time.

3.1.5 Consultation with other officials

Although the Act requires separate permits for construction and operation of the water supply system, the issues addressed by them are related. Consequently, before a construction permit is issued, the issuing official responsible for issuing the construction permit should commence a relationship of close consultation with the person who will be responsible for considering an application for an operating permit in respect of that system. This relationship of close consultation should continue throughout the construction permitting process and into the operating permitting process. This may be particularly helpful in cases where the person seeking the construction permit proposes to use a water source for which no other operating permits presently exist. The issuing official should also consult, where applicable, with any other health authority staff that has been responsible for inspecting the system to date.

The issuing official should also consider consulting with the drinking water officer and the medical health officer in respect of health issues, particularly in respect of the proposed water source.

An issuing official may refer a construction permit application to other agencies that may have an interest in the matter. For example, the issuing official may wish to consult with:

- The Ministry of Transportation and Infrastructure approving officers, given their responsibility for subdivision approvals in rural areas and the approving officers' information in respect of servicing issues.
- Ministry of Environment and Ministry of Forest, Lands and Natural Resources Operations, given their responsibilities for:
    - Licensing of surface water under the *Water Act*,
    - Ground water management and well protection under the *Water Act* and Ground Water Protection Regulation (including Water Management Plans under Part 4 of the *Water Act*, and
    - Regulation of utilities under the *Water Utility Act*
    - Environmental protection
    - Information respecting water source quantity and quality (this may include seeking technical assistance with hydro-geological matters).

- Local governments that may have existing or planned water supply systems that may be impacted by the system for which a construction permit is sought.

Finally, issuing officials may choose to consult with specialists concerning matters that are outside their expertise in certain circumstances. While most specialist consultations will be undertaken by applicants and the results reported as part of the application process, an issuing official is free to consult other specialists directly. This may include experts within government who may be able to provide input free of charge, or, in exceptional cases, other persons. In the latter case, any decision to incur expenditures in this regard should be made only after consultation with the senior manager of the health authority.

Ultimately, there is no requirement that consultations occur with other officials, and this is a matter for the issuing official's discretion. Furthermore, the issuing official is the responsible person for the decision regardless of whether consultation occurs.

Where an issuing official consults with another person in respect of an application, the issuing official must, as a matter of administrative fairness, ensure that any information or comment provided by the other person is shared with the applicant if it has the potential to adversely affect the applicant's interests. In such cases, the applicant must be given an opportunity to respond to the comments or information before any final decision is made.

The issuing official should document the recommendations received, particularly from the person who will be responsible for considering an application for an operating permit in respect of that system, in the final report regardless if the recommendations are taken into consideration for the construction permit.

Issuing officials may also choose to inform other agencies when construction permits have been issued. There is no requirement in the Act that this occur, and this is a matter for the discretion of the issuing official.

3.1.6 Deciding whether to issue a construction permit

3.1.6.1 Information to be considered

In deciding whether to issue a construction permit, the issuing official should consider all relevant information, including:

- All of the information set out in or accompanying the application form
- The results of water quality analyses as required by sections 7(3)(a) or 7(3)(b) of the Act
- Any relevant technical reference and best practices documents (see appendix 4 and Part B of this Guide)
- Operational history of the system (if any)
- Existing operating permit conditions (if any)
- Any information relevant to that system that has been obtained from assessments undertaken under section 19 of the Act in relation to systems that share the same water source or have other common conditions.

The issuing official should consult the reference treatment documents, the *Guidelines for Canadian Drinking Water Quality* and *Drinking Water Treatment Objectives (Microbiological) for Surface Water Supplies in British Columbia* (found in Part B of this guide), and local water quality information when considering which water analyses should be required under sections 7(3)(a) or 7(3)(b).

If an issuing official believes that further information is required before deciding whether to issue a construction permit, he or she should request the additional information from the applicant. This may include, for example, drawings, reports or technical assessments from professional engineers and other professionals. It may also include other water quality analyses that have been requested by the issuing official or the drinking water officer under section 7(3)(b) of the Act.

3.1.6.2 Decision-making process

In deciding whether to issue a construction permit, a fundamental consideration for all systems is to determine if the proposed new system or changes to the existing system meet appropriate public health engineering standards for that type of system. Another fundamental consideration for an existing system is to determine if the new construction is an improvement to the system. Regardless if it is new or existing, the water supply system should have sufficient ability to provide appropriate water to the intended user given the end use of the water, source water quality, proposed and/or existing treatment and/or disinfection technology, potential source-to-tap threats the system could encounter and finances (i.e., will the system be sustainable).

Generally, most systems will need to meet the requirement for potable water as set out in section 6 of the Act. This requirement does not apply in relation to:

- Systems that provide water for purposes that do not include human consumption or food preparation and are not connected with systems that do, or
- Small systems for which all recipients have a Point-of-Entry or Point-of-Use treatment system that provided potable water. (See Regulation, section 3.1)

For each of these circumstances, the water supplier must ensure that the location of non-potable discharge and non-potable water piping are identified by markings that are permanent, distinct and easily recognized.

Another consideration related to existing systems concerns the decision to allow for continuous improvements towards the desirable end-state rather than requiring all required changes in one construction cycle. The issuing official should consider the financial circumstances of the system and the ability of the water supplier to set out and follow a defined plan to work towards the desirable end-state over time.

Issuing officials may wish to refer to the best practices and reference documents set out in appendix 4, as applicable. Consideration may also be given to protective measures that may be available through legal regimes administered by other agencies, such as backflow prevention programs that may apply under municipal bylaws.

For water treatment requirements, specific factors and points that the issuing official may wish to consider include the following:[28]

New systems

- With respect to water quality analyses, the issuing official should ensure that he/she has adequate data to determine that the proposed treatment is adequate to address public health risks in relation to relevant microbiological and chemical/physical parameters.
- *For microbiological risks:* In deciding what treatment modalities are required to address risk to public health, the issuing official must consider the requirements of section 2 and Schedule A of the Regulation respecting coliform and E-coli. In addition, the issuing official should consider requiring the water system meet the *Drinking Water Treatment Objectives (Microbiological) for Surface Water Supplies in British Columbia* found in Part B of this guide. This document provides guidance about the multiple barrier approach, the removal or inactivation of viruses, the removal or inactivation of Giardia and Cryptosporidium cysts, as well as turbidity objectives, and *E. coli*.
- *For chemical risks:* The issuing official should consider whether to require any of the information described in Part B: *Determining Appropriate Drinking Water Chemical and Physical Monitoring Standards* of this Guide, along with any other information considered necessary in relation to that water system.
- Guidance from B.C. should be considered first. For circumstances that lack B.C. guidance, the issuing official should use guidance from the *Guidelines for Canadian Drinking Water Quality*.
- The issuing official should consider whether, and at what levels, disinfectant residuals are to be present in the distribution system. The issuing official may wish to consider the particulars of the system, Canadian and B.C. best practice documents, and requirements by other Canadian and international drinking water regulators.
- A construction permit may not be issued for a system in which the water originates from surface water, or ground water that is at risk of containing pathogens, unless the system provides for disinfection (See Regulation, section 5 (2)). The disinfection/treatment should result in water that meets the accepted levels as outlined above. There is no ability for a medical health officer to waive this requirement under the Act and Regulation. This circumstance does not necessarily apply to systems receiving an exemption (under section 3.1 of the regulation) to section 6 of the act, which is the potability requirement.
- Issuing officials may wish to consider whether alternatives exist for the provision of safe drinking water that would be preferable from a public health perspective. This might apply, for example, if a developer proposed to establish a small water system within reasonable proximity to an existing municipal system, and it would be possible to instead connect onto a municipal system with higher levels of treatment and protection. This is

[28] Some of all of these may not be relevant in respect of systems that are exempt from the potable water requirements, pursuant to section 3.1 of the Regulation.

only one relevant factor and each situation must be considered on its own merits, having regard to all relevant factors.[29]

Existing systems

- In some cases, an issuing official may decide to issue a construction permit for improvement or extension to an existing system in cases where, if the application were made to construct such a system today, the permit would not be issued.[30] In doing so, the issuing official should:

    a. satisfy himself or herself that the improvement will decrease the risk associated with the system or, at minimum, not adversely affect the risk and have other operational benefits,
    b. ensure the water supplier and drinking water officer are aware of the aspects of system that would not meet present standards if an application were made to create such a system today,
    c. advise that the approval of the construction permit does not affect the ability of the drinking water officer to impose any terms and conditions on the operating permit, or take any other steps he or she considers necessary under the act, to avoid unacceptable risks to public health,
    d. if not the drinking water officer, advise the drinking water officer regarding the issuance of the construction permit

Systems exempted from the requirement to provide potable water

Where applications are made for systems that are exempt from the requirement to provide potable water (as per section 3.1 of the Regulation), the issuing official should consider the factors outlined under the following scenarios:

(a) Systems that do not provide water for human consumption or food preparation and are not connected to water supply systems that do provide water for these domestic purposes.

[29] Where the issuing officials considers that it may be appropriate to require a proposed system to become part of another existing system, the issuing official should consult the owner of the existing system to determine the willingness and ability of that water supply system to take on additional users. The issuing official may, in the case of water obtained from surface sources licensed under the *Water Act*, also wish to consult officials responsible for the *Water Act*, and the potential application of section 33 of that Act. It states, "If satisfied that the joint use of works would conserve water or avoid duplication of works, the comptroller may order the joint use and set its terms."

[30] An example may be improvement to provide chlorination to a non-disinfected surface supply. This will provide enhanced protection and is affordable, but it does not deal with *Cryptosporidium* risks and may not adequately deal with *Giardia* risks.

- The water supplier must ensure that the location of non-potable water discharge and piping are identified by markings that are permanent, distinct and easily recognizable.
- The potential that persons might inadvertently use the water for human consumption or food preparation.
- Steps that can be taken to mitigate the above-noted risk (e.g., posting of signs, monitoring use).
- What constitutes as appropriate labeling for discharge points and piping to prevent inadvertent use of non-potable water for potable purposes
- The nature and extent of public health threat if the proposed system was inadvertently or intentionally used for human consumption or food preparation.

(b) Small systems that provide water only to Point-of-Entry or Point-of-Use systems and have the required permanent and distinct markings.

In addition to the factors noted above in relation to new systems and existing systems generally, issuing officials may wish to consider:

- What constitutes as appropriate marking for discharge points and piping to prevent inadvertent use of non-potable water for potable purposes
- Whether the issuing official considers that such a system presents an unacceptable risk to public health, considering the potential threats that may not be addressed by the POE or POU devices, or considering the risk that the POE or POU devices may fail or not be properly maintained. In particular, the drinking water officer may wish to consider:

    - Whether the POE or POU devices being used have received certification by an accredited third party agency to comply with standards established by an independent and respected national or international standard setting agency,[31] or whether the drinking water officer is aware of other information concerning a particular system that provides a similar degree of confidence in the system;

    - Whether the POE or POU systems have a warning device or other mechanism to alert users if the systems are not functioning properly;

    - Whether the POE or POU system has an automatic shut-off/warning system;

    - Whether the POE and POU system will be installed and operated in accordance with the manufactures suggestions or as directed by the issuing official;

[31] Examples include the Canadian Standards Association, NSF International, Underwriters laboratories Inc., Quality Auditing Institute International and Association of Plumbing & Mechanical Officers. For further information on standards and certification, see: http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/mater/index_e.html

- In the case of POU systems, the potential for water to be used from access points that do not have a POU device, and to be used in a manner which poses a threat to public health;

- Whether there are other practicable means of providing potable water to the users of the water supply system that would provide significantly greater confidence regarding public health protection (e.g., whether it would be reasonably feasible for a water supplier to install a centralized treatment system that provides protection from a broader range of potential pathogens or contaminants, or for the same pathogens or contaminants but with a significantly higher degree of reliability). In considering this factor it would be appropriate for the issuing official to weigh the marginal benefit to public health protection that would result from utilizing another form of treatment system against the feasibility and practicality of this other form of treatment to the applicant; and,
- Where the issuing official has concerns or potential concerns regarding a system that serves POE and POU devices, the degree to which those concerns could be addressed through the imposition of terms and conditions (discussed below).

The points and principles discussed above are set out solely for the assistance of issuing officials in the exercise of their discretion. Subject to those matters addressed by the Act and Regulation, the decision as to whether to issue a construction permit, and the decision to include any terms and conditions, rest with the discretion of the issuing official.

As a general matter, issuing officials may also consider the applicant's history with drinking water matters, for applications respecting new and existing systems.

3.1.7 Terms and conditions

The types of terms and conditions that an issuing official may include in a construction permit are not specifically set out in the Act. Further, the Act specifically states that the terms and conditions of a construction permit may set requirements and standards that are more stringent than those established by the Regulation (section 8(5)). Where terms and conditions are included, they should be included in the permit itself, or referred to in the permit and appended to it (for example, as a schedule). Comments and directions set out in a cover letter would not likely be considered terms and conditions of a permit unless expressly incorporated into the permit.

In exercising the discretion to include terms and conditions in a permit, the issuing official should consider which terms and conditions are necessary to meet the test for approval of a permit application. Without limiting the types of terms and conditions that may be included in a particular construction permit, a number of sample terms and conditions are set out in appendix 6. Issuing officials are encouraged to review the sample terms and conditions to determine whether any of them are appropriate to a particular construction permit application.

3.1.8 If the issuing official is not satisfied with the permit application

If the issuing official is not satisfied with an application and is not prepared to issue a construction permit based on the information provided to that point, having regard to terms and conditions that could be included, the issuing official should provide the applicant with reasons for the decision. If the issuing official believes that the application could potentially warrant approval if certain amendments are made to the proposed system, the issuing official should advise the applicant accordingly and invite the applicant to consider making the necessary changes and resubmitting the application.

If the issuing official believes a substantial amendment to the application is required, the issuing official should ask the applicant to consider making amendments to the application, rather than simply granting the permit with terms and conditions that would require substantial modification of the proposed construction. However, in cases where the proposed construction is acceptable to the issuing official with only minor proposed modifications, the issuing official may wish to simply issue the permit on the terms and conditions that the construction proceeds in accordance with specified minor modifications, rather than requiring an amendment and resubmission of the application.

3.1.9 Form of permit

Neither the Act nor Regulation specifies the form of a construction permit. A sample standard form permit is set out in appendix 7 as an example.

3.1.10 Pre and post- approval inspections

Pre- and post-approval inspections can be undertaken where the issuing official considers it necessary. In making this decision, the issuing official may wish to consult the drinking water officer or other public health official with knowledge of the system or local circumstances.

In most cases it is anticipated that the issuing official will not perform inspections, but rather will make it a term and condition of the construction permit that the system be constructed in accordance with the approved plans. The issuing official may also include a term and condition that the designer or installer of the system certify that it was installed or constructed in accordance with the plans as approved. The issuing official may also, in appropriate cases, wish to require the certification to be provided by a professional engineer.

If an issuing official for a construction permit believes that a system is not constructed in accordance with the plans as approved, he or she should advise the person who will be responsible for considering the application for an operating permit for that system. Such information should also be provided to the applicant.

3.1.11 Request for changes

Under the Act, an issuing official does not have the ability to vary a construction permit once issued. Therefore, if an applicant requests a substantial change to a construction permit and the issuing official believes that the change is appropriate, a new construction permit must be issued (Act, section 7(6)(c)).

To avoid the need for issuance of a new permit in cases of minor changes to design specifications, the issuing official may wish to include as a term and condition a requirement that the system be must constructed in accordance with the plans as approved, or with any modifications that may be subsequently approved by the issuing official in writing. In this way, the construction permit itself need not be changed to accommodate minor changes in design specifications.

3.1.12 Repairs

In some cases, people may have questions as to whether repair of an existing system requires a construction permit. Given the breadth of the wording in section 7, a construction permit will be required where repairs are undertaken if they result in the alteration or extension of the system. However, if a person is simply undertaking a repair to return a system to the condition for which construction had previously been authorized, then no construction permit would be required. Moreover, under section 6(3)(a) of the Regulation, a person is not required to obtain a construction permit for emergency repairs.

A person undertaking repairs to a system may also require certification under the EOCP program, depending on the class of system and the date on which the relevant requirements of the Regulation apply to it (see Regulation, section 12(3) and (4)). However, even in that case, EOCP certification will not be required if the person conducting the repairs is:

> … a person with specialist knowledge immediately relevant to maintenance or repair of a water supply system provided the maintenance or repair is conducted following procedures approved by a person certified by the Environmental Operators Certification Program (See Regulation, section 12(6)).

This section is intended to allow people with specialized technical knowledge of water treatment and distribution equipment (e.g., a service representative from an equipment manufacturer) to work on the maintenance or repair of that system, without that person being certified by the EOCP program. However, this applies only if the following criteria are met:

- The person must have "specialist knowledge". That term is not defined in the regulations. It should generally be taken to mean knowledge that is not commonly held and which is acquired by some specific form of training or experience.
- The specialist knowledge must be "immediately relevant" to the maintenance or repair. It is not sufficient if a person is a specialist in a particular area, but the maintenance or repair does not relate to that area. Similarly, the person cannot use this exemption to "get a foot in the door" and then conduct maintenance or repairs that do not require specialist knowledge
- The maintenance or repair must be conducted following procedures approved by a person certified by EOCP.

Drinking water officers and issuing officials should encourage water suppliers to call them in advance to discuss any situation in which the water supplier is unclear as to whether a person who plans to conduct maintenance or repairs without being certified himself or herself by EOCP meets the requirements of section 12(5) of the Regulations.

3.2 Operating permits

Section 8 of the Act prohibits a person from operating a water supply system unless the water supplier holds a valid operating permit. The water supplier must also comply with all terms and conditions of the permit.

The following sections address the process and principles for considering applications for new operating permits, or amendments to existing permits.

3.2.1 The issuing official

Under section 8 of the Act, an operating permit can be issued (or amended) by an "issuing official". According to section 7 of the Regulation, all drinking water officers are issuing officials for the purposes of operating permits.

Operating permits can also be issued by any person to whom a drinking water officer[32] has delegated this power.

3.2.2 Submission of applications

Applications for operating permits must be made to the issuing official "in a form satisfactory to the drinking water officer" (Regulation section 7(1)). Appendix 8 sets out a sample application form for an operating permit and related instructions for consideration. Health Authorities may wish to use these forms, or replace them with standard forms for use within their authority.

[32] In this context, the term "drinking water officer" refers to a person who has been appointed as a drinking water officer, and not a person to whom the powers of a drinking water office have been delegated. In other words, a person delegated powers is not able to further delegate them to another person.

3.2.3 Confirming a responsible person and specifying owners

Before issuing an operating permit, the issuing official should ensure that an owner has been identified as being responsible for the water supply system, that the system has been classified by the EOCP and that a senior operator that meets the level of the system classification is employed to operate the system.For circumstances in which the water supply system is owned by two or more persons, the owners should designate one of their numbers for the purposes of receiving and providing information and records as required or authorized under the Act (see Act, section 17(1)). The drinking water officer should designate one of the owners for the purposes of section 17 of the Act (see Act, section 17(2)). Issuing officials may require different types and amounts of information from different applicants, and may require more or less information than is in the standard operating permit application form. In general, the type of information that may be required in this regard, for different types of applicants, is as follows:

<u>Applications by or on behalf of individuals</u>

- Clarification of the person who proposes to be the principal responsible person, as well as the name of all other persons who will be "owners" as defined in section 1 of the Act
- Copies of any agreements between such persons regarding responsibility for, and liability for, the ongoing operation of the system

<u>Applications by or on behalf of local governments</u>

- Confirmation of the authority of the person making the application on behalf of the local government
- Clarification of the person who will hold primary responsibility for the ongoing operation of the system
- Names of other persons who will provide assistance to the person with primary responsibility

<u>Applications by or on behalf of partnerships</u>

- Copies of any certificates or registration statements filed by the partnership with the Corporate Registry (BC Registry Services), and any acknowledgements by the Corporate Registry.
- Confirmation of the authority of the person making the application on behalf of the partnership

Applications by or on behalf of corporations established under the BC *Business Corporations Act*[33] or the *Canada Business Corporations Act*,

- Copy of the company's certificate of incorporation
- Confirmation of authority by the corporation to make application for permit on its behalf
- Names of the officer or employee who will hold primary responsibility for the ongoing operation of the system
- Names of other persons who will provide assistance to the person with primary responsibility

Applications by or on behalf of societies established under the *Society Act*

- Copy of society's certificate of incorporation
- Confirmation of authority by the society to make application for permit on its behalf
- Names of the officer or employee who will hold primary responsibility for the ongoing operation of the system
- Names of other persons who will provide assistance to the person with primary responsibility

Applications by or on behalf of water users communities established under section 51 of the *Water Act*

- The incorporation records of the water users community
- The name of the manager, the committee of management, and all members of the water users community
- Names of the person who will hold primary responsibility for the ongoing operation of the system
- Names of other persons who will provide assistance to the person with primary responsibility

In cases where the issuing official is aware of other persons who also fall within the definition of "owner" as that term is used in the Act, the issuing official should consider naming the additional owners on the operating permit. However, the issuing official should be careful to note, in the cover letter or otherwise, that the listing of persons as owners on the operating permit does not necessarily mean that other persons might not also be considered "owners" in appropriate circumstances.

[33] The BC *Business Corporations Act* replaced the BC *Company Act* in 2004. The BC *Company Act* was repealed at the same time.

3.2.4 Consultation with other officials

When considering applications for operating permits, issuing officials should be in or commence a relationship of close consultation with the person who issued the construction permit and this relationship should continue until the operating permitting process is complete. The issuing official should review comments provided by agencies consulted at the construction permit application stage, and may engage in further consultations with other agencies if the issuing official considers this appropriate. The issuing official should also consider consulting with the drinking water officer and the medical health officer in respect of health issues. Such consultation may also be appropriate when considering potential amendments to an existing operation.

Ultimately, there is no requirement that consultations occur with other officials, and this is a matter for the issuing official's discretion. Furthermore, the issuing official is the responsible person for the decision regardless of whether consultation occurs. Any consultation does not fetter the decision-making discretion of the issuing official responsible for issuing the operating permit.

Where an issuing official consults with another person in respect of an application, the issuing official must ensure that any information or comment provided by the other person is shared with the applicant if it has the potential to adversely affect the applicant's interests. In such cases, the applicants must be given an opportunity to respond to the comments or information, before any final decision is made.

The issuing official should document the recommendations received, particularly from the person who issued the construction permit for that system, in the final report regardless if the recommendations are taken into consideration for the operating permit.

Issuing officials may also choose to inform other agencies when operating permits have been issued. Again, there is no requirement in the Act that this occur, and this is a matter for the discretion of the issuing official.

3.2.5 Deciding whether to issue an operating permit

3.2.5.1 Information to be considered

In deciding whether to issue an operating permit, the issuing official should consider all relevant information, including:

- All of the information set out in the standard application form
- The water supply system has an EOCP certified senior operator with the same level of certification as the EOCP classification of the system (Regulation, section 12(2))
- The results of water quality analyses provided in the application for construction permit, as required by sections 7(3)(a) or 7(3)(b) of the Act
- Any relevant technical reference and best practices documents (see Appendix 4, and Part B of this Guide)
- Whether a construction permit has been issued and any conditions attached to it[34]
- Information provided by the official that issued the construction permit or other agencies that were consulted
- Any information relevant to that system that has been obtained from assessments undertaken under section 19 of the Act in relation to systems that share the same water source or have other common conditions.
- The existence or absence of approvals under other legislation which are necessary for the proper operation of a water supply system. This may include, for example, a water license under the *Water Act* if surface water is to be used, or, in the case of a water utility under the *Water Utility Act*, a certificate of public necessity and convenience. Potentially relevant statutes are discussed further below in Chapter 5, section 5.3.[35]

[34] If a construction permit has not been issued and construction has occurred, the person will be in violation of section 7 of the Act, unless a waiver has been granted. Where a person is in violation of the construction permit requirements, they should be advised that a construction permit will be required before their application for an operating permit will be considered, and referred to the issuing official responsible for dealing with construction permits. In appropriate cases, the drinking water officer may also consider taking other compliance action, such as issuing a contravention notice under section 26 or pursuing an offence under section 45 of the Act.

[35] Although there is no specific requirement that issuing officials confirm compliance with other legislation, this is a relevant factor that they may consider. If the issuing official is aware that the applicant does not have the necessary approvals under another act, he or she may decline to issue the operating permit, or issue it subject to the condition that it becomes effective only when all necessary approvals have been obtained under other applicable laws.

If an issuing official believes that further information is required before a decision can be made whether to issue an operating permit, he or she should request that additional information from the applicant. This may include a request for reports or technical assessments from professional engineers and other professionals.

3.2.5.2 Decision-making process

In deciding whether to issue an operating permit for a new water system, consideration should be given to the matters discussed in section 3.1 of this Guide (in relation to construction permit applications). Namely, the primary consideration should be whether the proposed system, if operated in accordance with the terms and conditions of the permit, will have sufficient ability to provide safe drinking water to the intended user, having regard to potential threats that the system may face. In particular, the system should:

- Have staff that meet any certification requirements applicable to that class of system (see Regulation, section 12)
- Be capable of operating on an ongoing basis without significant threat of failure or contamination of water in the system
- Meet the treatment standards expectations as per section 3.1.6 of this Guide
- Comply with the recommended monitoring and reporting guidelines
- Have adequate cross connection procedures
- Comply with other operating best practice guidelines
- Address any other identified concerns that the issuing official considers to pose a threat to the water supply system in the circumstances

Issuing officials may wish to take into consideration a risk assessment of the particular water system when reviewing the timeline proposed by the water supplier to achieve the accepted treatment levels and other operational targets. Elements of that risk assessment could include:

- Quality of the source water
- Level of treatment currently provided
- Number of users of the water supply system
- Number of users from vulnerable populations.[36]

[36] Vulnerable populations within this context generally include children, elderly and people experiencing compromised immune systems due to circumstances such as HIV infection, diabetes, transplant medications and chemotherapy.

- History of water-borne diseases
- Historical water quality
- Whether the water is for purposes or provided in circumstances that are exempt from the potability requirements of the Act
- Population demographics and trends
- Community socioeconomic status
- Financial assets and potential for infrastructure grants
- Other relevant operating information.

For some parameters (e.g., lead or trihalomethanes (THMs)) it may be appropriate to consider factors such as the whether the water will be consumed on an ongoing or intermittent basis, or special vulnerabilities of persons likely to consume the water.

The timelines for achieving treatment and other system outcomes should be shortened in the face of increased risk to public health. The issuing official should not issue an operating permit unless he or she is satisfied that all unacceptable risks to public health will be addressed by the proposed system.

Systems exempted from the requirement to provide potable water

Where applications are made for systems that are exempt from the requirement to provide potable water (as per section 3.1 of the Regulation), the issuing official should consider factors outlined under the following scenarios:

(a) Systems that do not provide water for human consumption or food preparation and are not connected to water supply systems that do provide water for these domestic purposes.

- The water supplier must ensure that the location of non-potable water discharge and piping are identified by markings that are permanent, distinct and easily recognizable.
- The potential that persons might inadvertently use the water for human consumption or food preparation.
- Steps that can be taken to mitigate the above noted risk (e.g., posting of signs and monitoring use).

This list is not exhaustive – the drinking water officer may need to use discretion in determining people that may be at increased risk to infections caused by water-borne diseases.

- The nature and extent of the public health threat if the proposed system was inadvertently or intentionally used for human consumption or food preparation.
- The type of warning mechanisms or signs to advise the users and what constitutes as appropriate labeling for discharge points and piping to prevent inadvertent use of non-potable water for potable purposes.

(b) Small systems that provide water only to Point-of-Entry or Point-of-Use systems and have the required permanent and distinct markings.

In addition to the general factors noted earlier in this section, the drinking water officer may also wish to consider:

- What constitutes as appropriate markings for discharge points and piping to prevent inadvertent use of non-potable water for consumption or food preparation. Whether overall such a system presents an unacceptable risk to public health, considering the potential threats that would not be addressed by the POE or POU devices, or considering the risk that the POE or POU devices may fail or not be properly maintained. In particular, the drinking water officer may wish to consider:

  - The steps that the water supplier is prepared to take, and has the ability to take, on an ongoing basis to ensure the proper operation, maintenance and monitoring of POE and POU devices supplied by the water supply system;

  - The emergency response plan the operator has and how that may address threats to public health that may arise that the POE / POU systems may be incapable of effectively treating;

  - Whether a pilot study may be appropriate to help address any uncertainties that exist with respect to the efficacy of the system, whether the applicant is prepared to conduct such a pilot study, and the results of the pilot study where conducted;[37]

  - The steps that the operator has taken and is prepared to take to provide or otherwise ensure ongoing education and training of POE and POU device users;

  - In the case of POU systems, the potential for water to be used from access points that do not have a POU device, and used in a manner which poses a threat to public health;

[37] Where a pilot study is conducted, the system must comply with any applicable provisions of the act and regulations (including the requirement for an operating permit where applicable). In such cases the drinking water officer may consider issuing an operating permit for a specified period of time, and with terms and conditions he or she considers necessary, to provide reasonable safeguards for public health while the pilot study is being undertaken.

- Where an issuing official has exempted the applicant from the need for a construction permit, any of the factors that would have otherwise been considered at the stage of a construction permit application (see section 3.1.5.2 above); and,
- Where the issuing official has concerns or potential concerns regarding a system that uses POE or POU devices, the degree to which those concerns could be addressed through the imposition of terms and conditions (discussed below).

As a general matter, issuing officials may also consider the applicants history with drinking water matters, for applications respecting new and existing systems.

3.2.6 Terms and conditions

The types of terms and conditions that an issuing official may attach to an operating permit are broad. They include, but are not limited to, terms and conditions respecting:

- Treatment requirements (which may include dates by which they must be implemented)
- Equipment, works, facilities and operating requirements (including compliance with the construction permit)
- Qualifications, training or certification of the persons operating, maintaining or repairing the water supply system
- Monitoring of the drinking water source and water in the water supply system, including specifying a minimum bacteriological sampling frequency
- Standards applicable to the water in the water supply system (e.g., setting a minimum free chlorine residual level)
- Reporting and publication of monitoring results or other information respecting the water supply system. (Act, section 8(3))[38]
- Well protection and source protection
- Developing a cross connection control plan
- Setting the frequency for reviewing and updating the Emergency Response and Contingency Plan (see appendix 2 for a sample Emergency Response and Contingency Plan)
- Maintenance and servicing of Point-of-Entry and Point-of-Use systems[39]

[38] In this regard, consideration should be given to require publication of all sampling undertaken, not merely sampling undertaken at the frequency required by the regulations.

[39] These could be attached either to the operating permit of a water supply system that supplies water to point of use or point of entry systems, or to the operating permits respecting point of entry and point of use systems themselves if they are used in circumstances that render them a water supply system under the act and thus in need of their own operating permit.

Also, the Act specifically provides that terms and conditions of an operating permit may be more stringent than the requirements and standards set by the Act or Regulation (Act section 8(5)). Generally, the standards set out in terms and conditions may not be less stringent than those set out in the Act and regulations. However, there are two exceptions:

1. Section 12(4) of the Regulation allows the operating permit to set a different date on which the operator certification provisions apply. When deciding whether or not to set less stringent standards respecting EOCP certification, the drinking water office or delegate should consider whether there are sounds reasons for applying an alternate date (e.g., lack of availability of courses in the region), and he or she should be satisfied that modifying the requirements will not pose an unacceptable risk to public health in respect of that particular system. This does not constitute a "waiver" from the certification requirements, but allows suppliers some extra time, and an opportunity to provide a strategy for obtaining training and experience necessary to achieve certification.

2. Section 8(3) of the Regulation allows for sampling frequencies to be less stringent than those set out in schedule B. In deciding whether to set lower frequencies, consideration should be given to all relevant factors including:

    - The water source (including whether it is surface water or ground water at risk of influence by surface water)
    - The history of the system
    - Any special vulnerabilities of the intended users
    - Experience of other systems using the same or related water sources
    - Whether the water is being provided to Point-of-Entry or Point-of-Use treatment systems
    - Other monitoring that is being undertaken by the water supplier (such as chlorine residuals, other disinfection effectiveness monitoring, turbidity, particle counts, etc.)

More generally, in exercising the discretion to attach terms and conditions to a permit, the issuing official should consider which terms and conditions are necessary to ensure that all significant threats to public health are addressed. To help facilitate the exercise of discretion in this regard, appendix 9 contains additional information regarding various categories of potential

terms and conditions, and sample terms and conditions that can be included in operating permits as the issuing official considers appropriate.

In general, terms and conditions should not duplicate requirements in the Act and Regulation unless there is some difference in the applied standard. Moreover, issuing officials should ensure that water suppliers are aware that they are required to meet the requirements set out in the Act, the Regulation and the operating permit, and that not all requirements are set out in the permit. Issuing officials may, in the cover letter accompanying the permit, wish to draw the permit holder's attention to other obligations that exist by virtue of the Act and Regulation, but it must be made clear that the permit holder is responsible for ensuring compliance with all applicable requirements, whether or not they are listed in the permit and cover letter.

A sample cover letter for an operating permit is set out in appendix 10.

3.2.6.1 Requirements regarding operator training and certification

Operator training and certification requirements are set out in section 12 of the Regulation. It provides specific certification requirements (through the Environmental Operator's Certification Program or EOCP) for persons who operate systems classified by the EOCP as level 1, 2, 3 or 4. Generally, these are systems other than "small systems."[40] Persons who operate, maintain or repair such systems must be appropriately certified by the EOCP. EOCP certification involves four elements:

1. System Classification

   The water supplier (owner) must submit an application and fee to the EOCP for review and consideration of a facility classification and number.

2. Operator Training

[40] An introduction to EOCP is available in section 1.9 of this guide. For more detailed information on the EOCP classification system, see http://www.eocp.org/certpg.html.

A water system operator may be trained on the job, participate in classroom instruction, combined classroom and hand-on training, or distance educational training. Courses are not offered by EOCP, but EOCP maintains a registry of courses that can be applied towards EOCP certification.

3. Operator Experience

   Operator must have specified types and amounts of practical experience to be eligible to write a certification examination

4. Operators Certification

   Upon completion of the operator training, the EOCP certification exam may be taken. Although no specific training is a requirement to write a certification exam, EOCP often schedules exams in conjunction with training activities for the convenience of Operators, especially those in remote locations.

Section 12(2) of the Regulation provides that operators of systems classified as classes 1, 2 and 3 require certification as of January 1, 2006. However, section 12(5) of the Regulation provides that an operating permit may establish a later date on which these rules apply to a water supply system. Drinking water officers should consider exercising their discretion to delay the operator certification requirements of the Regulation only in cases where they are satisfied that:

(a) It would be impracticable for the water supplier comply within the timeframe specified in the Regulation,
(b) The water supplier can demonstrate, to the satisfaction of the drinking water officer, that there would be minimal risk to public health by the delay in obtaining the certification required under the EOCP program, having regard to the circumstances of that water supply system and any potential threats to it, and
(c) The water supplier has a strategy to provide the requisite degree of training and experience within a reasonable period of time.

The drinking water officer should consider contacting the EOCP prior to making discretionary decisions with respect to operator certification in order to receive aid with evaluating any information received from the water supplier.

3.2.6.2 Terms and conditions respecting operator qualification for small systems

Although section 12 of the Regulation does not directly impose any operator qualification requirements for small systems, section 12(4) does provide that an operating permit may require

a person to be certified by EOCP to operate, maintain or repair a small system. The decision of whether to impose such a term and condition is one for the drinking water officer to make, in his or her discretion. Generally, the requirement for operator certification should be imposed (through operating permit terms and conditions) on small systems in cases where the drinking water officer considers that there is something about the system in question or that the persons operating it requires a higher standard of formal training than would be normal for a small system. This might include, for example:

- Systems which have a history of problems due to operator error or omission
- Systems which are particularly vulnerable to errors or omissions in operation
- Systems which may present significant public health risk even though they are a small system (for example, systems serving vulnerable users such as a small rural hospital).

Drinking water officials can impose terms and conditions related to operator training and knowledge, short of requiring formal certification by EOCP. This could include, for example, requiring an operator to read specified materials, complete a basic water safety course such as Watersafe,[41] etc. The terms and conditions could also include requiring the water supplier to prepare an operations guide for the system,[42] or having the system inspected from time to by a person who is qualified by EOCP for small systems.

While reasonable efforts should be made to ensure some degree of consistency in the approach taken on these matters, there is no requirement that each system be treated exactly the same in this regard. To the contrary, the exercise of discretion on a case-by-case basis will require some differences in treatment of systems and this is to be expected under the terms of the Regulation.

3.2.7 If the issuing official is not satisfied with the permit application

If the issuing official is not satisfied with an application and is not prepared to issue an operating permit based on the information provided to date, having regard to terms and conditions that could be included, the issuing official should provide the applicant with reasons for the decision.

[41] http://www.watersafebc.ca
[42] The BCWWA website provides information that may assist in preparing operational guides. (See www.bcwwa.org)

If the issuing official believes that the application could potentially be approved if certain amendments were made to the application, then the issuing official should advise the applicant accordingly and invite the applicant to consider making the necessary changes and resubmitting the application.

3.2.8 Form of permit

Neither the Act nor Regulation specifies the form of an operating permit. A standard form permit is, however, set out in appendix 11 for consideration.

3.2.9 Changes

Where an owner seeks an amendment to an operating permit, the owner should be asked to make the request in writing, detailing how the circumstances of the water supply system have changed in such a way that they believe would warrant the amendment to the operating permit.

Where changes to the terms and conditions are proposed on the initiative of a drinking water officer, those changes can only be made after consultation with the water supplier and consideration of any comments the water supplier may provide in respect of the proposed changes (see Act, section 8 (4)). There is no requirement that this consultation occur in writing. In general, in the interest of time and efficiency, it may be sufficient to consult verbally with persons in respect of changes to which they are unlikely to have any objection. If, however, the person is likely to, or has indicated he or she does, object to a proposed change, the rationale for the proposed change should be provided in writing, and the person's response should similarly be requested in writing. There is no requirement that the permit holder consent to the proposed amendments, but his or her views must be considered before any final decision is made.

Although operating permits can be changed, it is not possible to change the name on an operating permit to effectively transfer it to another person. Rather, section 7(2) of the Act expressly provides that operating permits are not transferable.

Chapter 4: Ongoing Functions of Drinking Water Officers

4.1 Routine monitoring, inspections, investigations and reports

There are a variety of ways in which drinking water officers may obtain information regarding potential problems with water supply systems. These include:

- Notice of immediate reporting circumstances by laboratories (Act, section 12) [43]
- Report of threat to drinking water by water suppliers (Act, section 13)
- Report of threats where reporting is required under other acts (Act, section 24)
- Complaints or requests for investigations by users of the system
- Information generated through assessments (Act, section 19)
- Routine inspections, auditing and follow-up by the drinking water officers, Environmental Health Officers and Public Health Inspectors.

In addition, there is a potential for regulations to be developed that would require officials from other agencies to report concerns to drinking water officers when they become aware of them (Act, section 24(2)). However, no such regulations have been developed to date.

To ensure that drinking water officers are able to receive information in circumstances where it is to be provided to them, they should ensure that approved laboratories and water suppliers are provided with their contact information. Each health authority may wish to develop specific practices in this regard that suit its own circumstances. In general, this should ensure that the drinking water officer can be contacted immediately, and that there is no potential for information to sit for unacceptable periods of time on voice message systems or otherwise.

[43] Similar notice must also be provided to the medical health officer. See section 12(1)(c).

Health authorities are encouraged to consider designating a single, 24-hour on call number which could be provided as the contact number for all such circumstances. The health authority should ensure that any such number is staffed by a person who, in turn, is able to immediately contact the drinking water officer or another appropriate official.

4.1.1 Routine monitoring and inspections

4.1.1.1 Authority

Drinking water officers have the authority to conduct inspections under section 40 of the Act. This section in turn gives them all of the powers of a medical health officer under Division 1 of Part 4 of the *Public Health Act*.

4.1.1.2 When inspection may be made under the *Public Health Act*

23 Subject to section 25 *[entering to inspect]*, a health officer may stop a person or vehicle, enter a vehicle or place and inspect a vehicle or place for any of the following reasons:

(a) for the purposes of determining whether

(i) the person is an infected person,

(ii) the person has custody or control of a person who is an infected person, or of a thing that is an infected thing,

(iii) the vehicle or place is an infected thing, or has an infected thing in it or on it,

(iv) a health hazard exists or likely exists in or on the vehicle or place, or in relation to the activities of the person, or

(v) a provision of this Act or a regulation made under it, a term or condition of a licence or permit issued under this Act or an order made under this Act may have been, is being or is likely about to be contravened;

(b) if the person, vehicle or place is described in a report made under Division 3 *[Reporting Disease, Health Hazards and Other Matters]* of Part 2;

(c) to determine whether

(i) a licence or permit should be issued, or an order should be made, under this Act, or

(ii) a term or condition of a licence or permit issued under this Act, or an order made under this Act, should be varied or rescinded;

(d) to monitor or confirm compliance with

(i) a provision of this Act or a regulation made under it, or

(ii) a term or condition of a licence or permit issued under this Act, or an order made under this Act;

(e) if a health officer has the power to monitor or confirm compliance with a provision of another enactment, to monitor or confirm compliance with that provision;

(f) for any purpose for which an inspection by a health officer is expressly authorized under this or any other enactment;

(g) for a prescribed purpose.

4.1.1.3 Inspection powers under the *Public Health Act*

24 (1) A health officer may do one or more of the following for the purposes of an inspection:

(a) be accompanied or assisted by a person who has special, expert or professional knowledge of a matter relevant to the inspection;

(b) require a person to produce relevant records or things in the person's possession or control;

(c) inspect, copy or remove relevant records or things;

(d) require a person to stop engaging in an activity, or stop the operation of a thing;

(e) require a person to demonstrate a relevant skill, or operate a thing or carry out a procedure as directed by the health officer;

(f) make records in respect of a person, place or thing;

(g) take samples and perform analyses and tests, including tests in which a sample is destroyed;

(h) require that a place or thing not be altered or disturbed for a reasonable period of time;

(i) question a person whom the health officer reasonably believes to have relevant information;

(j) attend a relevant training program;

(k) make an order necessary for the purpose of exercising a power of inspection.

(2) If a health officer removes records or things under subsection (1) (c), the health officer must

(a) provide a receipt for the records or things to the person from whom they were taken, and

(b) subject to a power under this or any other enactment to order a thing destroyed, promptly return the records or things

(i) when they have served the purposes for which they were taken, or

(ii) if an action or a proceeding is taken under this or any other enactment as a result of an inspection, and the records or things are relevant to the action or proceeding, no later than 3 months after the conclusion of the action or proceeding.

(3) For the purposes of an order made under subsection (1) (k), the person who is subject to the order must comply with it.

4.1.1.4 Entering to inspect under the *Public Health Act*

25 (1) A health officer may conduct an inspection at any reasonable hour.

(2) Before entering a vehicle or place, a health officer must

(a) take reasonable steps to notify the owner or occupier of the place of the date and time that the health officer will be entering, and

(b) if the place is a private dwelling, obtain either the consent of the owner or occupier or a warrant to enter.

(3) Despite subsection (2) (a), a health officer may conduct an inspection without providing notice if

> (a) providing notice would not be reasonably possible or practical in the circumstances, or
>
> (b) in the case of a regulated activity, providing notice would frustrate the purposes of the inspection.

These inspections powers may be particularly important in relation to Point-of-Entry and Point-of-Use treatment systems, as these might not[44] be subject to the general rules regarding monitoring of water under section 11 of the Act, or the requirement to hold an operating permit under section 8.

Drinking water officers should be familiar with all of these provisions and be prepared to use them where circumstances so require.

The inspection powers apply generally and, unlike some other provisions of the Act, they do not apply only to "water supply systems". Inspection powers can be used in relation to systems serving a single family residence.

4.1.1.5 Frequency of inspections

The decision as to how frequently to conduct routine inspections is one that must be made by drinking water officers, based on risk assessment (see section 5, below) and all relevant factors. This may include consideration of matters such as the number of systems within their responsibility, distance and accessibility to sites, history of compliance or noncompliance, threats that have been identified in relation to the system or its area and overall workload demands. There is no specific requirement in the Act that all systems be inspected, and there is no specific requirement regarding the timing and frequency of inspections when they do occur. However, drinking water officers are encouraged to develop and document an inspection policy appropriate to the nature and circumstances of the systems within their area of responsibility. Such policies should be developed in consultation with management of each health authority.

[44] The question of whether a system that uses point of entry or point of use treatment is a "water supply system" to which the various substantive requirements of the Act and Regulations apply is one that must be considered on the facts of each case, having regard to the definition of "water supply system".

Where inspections are conducted, the drinking water officer should:

- Assess the system's compliance with the Act, Regulation and terms and conditions of construction and operating permits
- Review the emergency response and contingency plan (and refer the water supplier to supporting development tools where appropriate)[45]
- Review monitoring and other records (including operational logs, results of confirmation of adequacy of treatment, chlorine residual levels),[46]
- Determine if there are any identifiable threats to the drinking water source
- Identify any deficiencies in comparison with normal waterworks standards
- Review cross connection control program
- Review the risk-assessment rating for the water supply system (see section 4.5)
- Review the status of the water supplier's continuous improvement plan (if any)
- Consider whether an assessment under section 19 is required.[47]

For each inspection, the drinking water officer should complete an Inspection Form/Hazard Rating form. The specific type of form may vary by region to reflect the needs and circumstances of each health authority. A general form for consideration is set out in appendix 12.

4.1.2 Investigations

An investigation differs from inspection in that an inspection is undertaken solely for the purposes of monitoring and assessing compliance and to identify threats. An investigation, by

[45] For emergency response plans respecting small systems, see the Ministry of Health document entitled *Emergency Response Planning for Small Waterworks Systems*, which can be found at http://www.healthservices.gov.bc.ca/protect/pdf/PHI061.PDF. A sample of an emergency response plan template can be found in the appendix 2 of this guide.

[46] See appendices for a sample of an annual report of monitoring.

[47] For more information about completing a source to tap screen or assessment go to http://www.health.gov.bc.ca/protect/water-system-assessment.html or http://www.health.gov.bc.ca/protect/source.html

contrast, occurs when an official has some reason to believe that a form of noncompliance exists. An investigation is used to determine whether and to what extent this is the case, and to assemble evidence necessary to take remedial or enforcement action as appropriate.

While it may be difficult in some cases to draw a distinct line between inspection and investigation activity, where a drinking water officer believes that their activities might be reasonably characterized as being an investigation, the officer should:

- Notify the subject of the investigation that the drinking water officer has some reason to believe there may be a concern with respect to noncompliance (unless the provision of that information at the time would materially impair the ability to investigate)
- Take notes of all discussions and observations
- Where evidence is taken, ensure that the drinking water officer will, if necessary, be able to testify as to the integrity of the evidence from the time it was obtained to the time it may be presented in court (i.e. "the chain of continuity").

Assembling evidence as part of an investigation does not necessarily mean that formal compliance action will be undertaken, and in many cases the concerns can be remedied through information, discussion and education of the water supplier. However, the foregoing principles should be followed in any event, to help avoid challenges to the drinking water officer's actions if informal means do not resolve the matter and more formal compliance action is required.

4.1.2.1 Requests for investigations

The Act, under section 29, sets out a process for dealing with requests for investigations. It states:

(1) If a person considers that there is a threat to their drinking water, the person may request the drinking water officer to investigate the matter.

(2) A request under subsection (1) must be in writing and must include specifics of the facts that the person considers constitute the threat.

(3) On receiving a request under subsection (1), the drinking water officer must review the request and consider whether an investigation is warranted.

(4) As applicable,

(a) if the drinking water officer decides against undertaking an investigation, the officer must advise the requesting person of this, and

(b) if the drinking water officer undertakes an investigation, the drinking water office must advise the requesting person of the results of the investigation.

Under section 29 of the DWPA, any person has a right to request an investigation by a drinking water officer if they consider there is a threat to their drinking water. The drinking water officer is obligated to consider this request and should be able to make a decision whether to initiate an investigation based on the submission of information outlined in Part B: *Requests For Investigation Of A Drinking Water Threat Under The Drinking Water Protection Act* of this guide.

Drinking water officers' should also proactively inform persons concerned with their drinking water, that they have a right to request an investigation under section 29 if they feel that the water is threatened and can bring forward specifics of the facts that constitute the threat.

Section 29 requires requests for an investigation to be in writing. If a request is made verbally to a drinking water officer, the drinking water officer should inform the person the request is required to be in writing.

Information provided by an applicant in relation to the questionnaire referred to in Part B: *Requests For Investigation Of A Drinking Water Threat Under The Drinking Water Protection Act* should provide sufficient evidence for a drinking water officer to make a determination as to whether to initiate an investigation into the matter. The purpose of an investigation is to gather information to determine whether and to what extent a threat exists. It is not incumbent on the person requesting the investigation to definitively prove to the drinking water officer that the threat exists.

If it can be reasonably demonstrated, based on the preponderance of responses in the questionnaire, that a threat to drinking water may exist, this is a sufficient basis on which to initiate an investigation.

In deciding whether or not to conduct an investigation, drinking water officers must consider all relevant factors. This may include, but is not limited to, considering:

- Whether the request for investigation includes credible information to suggest a threat may exist
- Any information that the drinking water officer has on file in respect of the water supply systems and prior dealings with the water supply system or owner
- The degree of potential harm that could occur if a threat complained of does exist or comes into existence
- The history of the drinking water officer's dealings with the person requesting the investigation[48]
- The extent the matter has already been reviewed (e.g., through other complaints or at the initiative of the drinking water officer)
- The extent to which the matter is being or will be investigated by another agency with related authority (e.g., Ministry of Environment staff responsible for administering the *Ground Water Protection Regulation* under the *Water Act*)[49]

If the drinking water officer decides not to conduct an investigation, he or she must provide a basic explanation as to why the decision was made. Drinking water officer s should provide this to the person requesting the investigation in writing.

If an investigation is conducted, the drinking water officer must advise the person who requested the investigation of the results of the investigation. The drinking water officer should specify his or her findings regarding whether any threat was found, and what, if any, follow-up action will be taken. The amount of information and detail provided will vary depending upon the facts of the case, and other factors including, but not limited to, the significance of the threat with respect to human health, the complexity of the investigation, the availability of supporting data and the

[48] In some cases, the person requesting the investigation may be the water supplier

[49] The fact that there may be overlapping authority or activity being undertaken by another agency does not mean that the drinking water officer lacks authority or may disregard responsibility in relation to a matter. Such situations should be carefully assessed in accordance with the principles for cooperation with other agencies, discussed below in Chapter 5, sections 5.3 and 5.4 of this Guide.

potential impact on the population at risk from the threat. The drinking water officer's response should provide enough information to allow the recipient to understand the drinking water officer's conclusions and the basis upon which they were drawn. Drinking water officer's should also provide this information in writing.

4.1.3 Privacy rights and warrants

Section 8 of the Canadian *Charter of Rights and Freedoms* states:

> Every person has the right to be secure against unreasonable search and seizure.

There is a significant body of case law defining what constitutes a "search" or "seizure" for the purposes of section 8 of the *Charter*, and when a search or seizure will be considered "unreasonable". These will depend on various factors, including whether the person in question has a reasonable expectation of privacy in the place or thing being searched or seized and the nature of the inspection or enforcement activity being undertaken.

The *Drinking Water Protection Act* or the *Public Health Act* does not allow a drinking water officer to enter a private dwelling place, unless the occupant consents or a warrant has first been obtained from court. It is important to respect this limitation, as a failure to do so could compromise an investigation. Such failure may also constitute a violation of section 8 of the *Charter* and could result in a court awarding remedies against the health authority.

If a drinking water officer believes that it is necessary to enter a private dwelling and consent cannot be obtained, or it is not appropriate to request entry under the circumstances, a warrant should be sought. To obtain a warrant, an application must be made to a justice under section 41 of the Act. It states:

> If satisfied by evidence on oath or affirmation that access on or into property is necessary for the purposes of this Act, a justice may issue a warrant authorizing a person named in the warrant to enter on or into property and conduct an inspection, undertake hazard abatement or prevention activities or take other action as authorized by the warrant.

Legal counsel should be consulted regarding the form and process for applying for a warrant, as the Act does not prescribe the forms to be used.

Once a warrant is issued, it must be executed against the party to whom it is directed. When executing a warrant, the following principles and practices should be applied:

- The drinking water officer executing the warrant should be accompanied by at least one other person
- If the drinking water officer executing the warrant has any reason to believe that the property owner or occupant will not cooperate with the warrant, the drinking water officer should speak in advance with the local police or RCMP and request that a peace officer accompany the drinking water officer in the execution of the warrant
- Upon arrival at the property, the drinking water officer executing the warrant must attempt to advise the occupants of the property of the warrant. The drinking water officer should bring an additional copy of the warrant to leave for the occupant of the property
- If there is no one at the property that is able to allow physical access, the drinking water officer should attempt to execute the warrant at another time, unless there is some imminent danger to human health that would result from any delay in executing the warrant
- If there is a danger to human health that requires immediate attention and there is nobody at the property that is willing or able to provide the drinking water officer with access based on the warrant, entry to the property should be obtained with the assistance of a peace officer.

Warrants can also be obtained under the authority of the *Offence Act* and the *Public Health Act*. However, the relevant legal standards and process may differ somewhat from a warrant requested under the *Drinking Water Protection Act*. If a drinking water officer believes that the ability to obtain a warrant under section 41 of the *Drinking Water Protection Act* is not appropriate, they should discuss the matter with legal counsel before seeking a warrant under these other acts.

4.1.4 Reports that must be made by water suppliers and laboratories

Water suppliers are required to report various matters to a drinking water officer. This includes reports of monitoring under section 11 of the Act and any applicable operating permit requirements, reports made pursuant to emergency response plans (Act, section 10), and reporting of threats to drinking water (Act, section 13). Drinking water officers should consider

all such information in assessing risks and deciding whether any further action is required under the act in relation to the relevant water supply system.

Reports may also be made by laboratories under section 12 of the Act where immediate reporting standards are not met.

To facilitate timely and effective reporting by laboratories, some health authorities have established protocols including a single number for the laboratories to call to discharge their obligations respecting reporting to the drinking water officer and medical health officer under section 12(3).

4.1.5 Reports that must be made by other officials

Section 24 of the Act allows the Lieutenant Governor in Council (Cabinet) to make regulations that would require specified public servants and public officials to report to a drinking water officer "any situation they observe, or of which they become aware that they consider may be a threat to drinking water".

No regulations have been developed in this regard to date. However, drinking water officers are encouraged to establish working relationships with other statutory decision makers, and to request other officials to provide information about threats to drinking water on a voluntary basis wherever possible. If a drinking water officer believes that it is not sufficient to rely on voluntary cooperation by other agencies in this regard, then they should discuss the matter with their Senior Manager. The Senior Manager may wish to refer the matter for consideration by the Drinking Water Leadership Council, which may consider making recommendations to government respecting the development of regulations to compel such reporting.

4.2 Obtaining further information

When a potential concern regarding drinking water is identified through routine monitoring, inspections or investigation, the drinking water officer must consider whether additional

information is required to determine an appropriate response. There are several ways in which additional information can be obtained.

4.2.1 Additional monitoring, testing and laboratory reporting

Section 8(6) of the Act allows the drinking water officer to order a water supplier to undertake additional monitoring or testing, if the drinking water officer considers that further information is necessary to determine whether the water supplied by the system meets the requirements of section 6 [potable water] or the requirements and standards established by the Regulation and operating permit. Further technical guidance on additional monitoring and testing can be found in Part B of this Guide.

Additional monitoring and reporting requirements can be imposed without amending the operating permit itself. Where such an order is made, no particular form is required. However,

- The order should be made in writing,
- It should specify that the order is being made under the authority of section 8(6) of the Act,
- It should specify the precise type and frequency of monitoring or testing required, and
- It should specify the manner in which the results must be reported to the drinking water officer and, if directed by the drinking water officer, the public as well.

Further, section 8(5) of the Regulation allows a drinking water officer to request laboratories to provide the drinking water officer, the water supplier, or both, with listings of all water samples sent by the water supplier, and the results of testing for total coliform and *Echerichia coli*. Drinking water officers may exercise this power simply by contacting the laboratory in question.

Where potential concerns exist in relation to Point-of-Entry or Point-of-Use systems, drinking water officers have the following options available in terms of obtaining additional information:

- Request the end user to monitor voluntarily
- Require the water supplier who provides water to the Point-of-Entry or Point-of-Use systems to monitor the water, either

  (a) Before the water enters the Point-of-Entry or Point-of-Use systems, or

(b) After those systems provided that the person using the Point-of-Entry or Point-of-Use system is prepared to provide the water supplier with access for sampling purposes

- Order a person causing or contributing to a health hazard to provide information and undertake tests under section 25(3)(a) and (b) of the Act (provided the drinking water officer has reason to believe a health hazard exists or is imminent as per section 25(1)).

4.2.2 Assessments

Under Part 3 of the Act, a drinking water officer can require a water supplier to complete a water source and system assessment. The drinking water officer can order a water supplier to prepare an assessment if

> the drinking water officer has reason to believe that an assessment is necessary to properly identify and assess threats to drinking water in relation to the water supply system (section 19(1)(a)).

The term "threat" is defined in section 1 of the Act to mean:

> in relation to drinking water, a condition or thing, or circumstances that may lead to a condition or thing, that may result in drinking water provided by a domestic water system not being potable water

In deciding whether an assessment should be ordered, it is important to recognize that the purpose of an assessment is, according to section 18(2):

> …. to identify, inventory and assess:
>
> (a) the drinking water source for the water supply system, including land use and other activities and conditions that may affect that source,
>
> (b) the water supply system, including treatment and operation,
>
> (c) monitoring requirements for the drinking water source and water supply system, and
>
> (d) threats to drinking water that is provided by the system.

Circumstances in which an assessment might be appropriate include, but are not limited to, situations where there has been:

- A history of malfunctions or threats to drinking water from the water supply system
- A history of boil water orders / advisories
- A history of threats to drinking water in the area
- Significant changes in the quality of water in a water supply system
- Problems experienced by water suppliers in similar circumstances
- Impacts or potential impacts to the quality of the water source (e.g., nearby development or resource extraction)
- More than the prescribed number of years have passed since the previous assessment [there is nothing in the Regulation at present]

In deciding whether an assessment is necessary, the drinking water officer may wish to consult with the medical health officer, and should also consult the water supplier. However, it is not necessary to obtain the consent of a water supplier before ordering an assessment.

The drinking water officer can order two or more water suppliers to prepare a joint assessment if they use the same drinking water source or related sources (Act section 19(2)).

4.2.2.1 Process for assessments

Neither the Act nor the Regulation set out the specific process by which an assessment must be completed. Consequently, the process, preparation, form, content, area of coverage and time for completing an assessment must be done in accordance with the directions of the drinking water officer. In determining which directions to give, the drinking water officer must consult the medical health officer, and may establish a technical advisory committee (Act, section 20).

As guidance to drinking water officers and water suppliers in relation to assessments, the Ministry of Environment and the Ministry of Health developed three assessment tools for consideration. These are the Drinking Water Source-to-Tap Screening Tool (appendix 13), the Water System Assessment (appendix 14) and the Comprehensive Drinking Water Source-to-Tap Assessment Guideline (appendix 15).[50] These documents were on the basis of extensive

[50] The Screening Tool is a simple questionnaire that suppliers can complete themselves. The Comprehensive Assessment Guideline is intended for professionals who are investigating more complex risks to water supply systems. The Water System Assessment fills a gap between the Screening Tool and the Comprehensive Assessment Guideline. The intention is to offer an alternative that will allow for developing an action plan to reduce risks to and in a water system, without the added cost and time commitment of a comprehensive assessment.

consultation with water suppliers, industry and interested government agencies, and have been the subject of peer review and comment. Drinking water officers are encouraged to use these tools when they believe an assessment is required. There is no legal requirement that the drinking water officer require suppliers to use these specific tools, and if the drinking water officer believes that some other form of assessment is required, the drinking water officer should modify or replace these tools with the process and requirements the drinking water officer considers appropriate in the circumstances.

Where a drinking water officer orders a water supplier to complete an assessment, the drinking water officer must write a letter to the water supplier explaining that they are required to complete the assessment pursuant to section 19 of the Act. The letter must also indicate the process, form, content and area of coverage for the assessment. Where the tools referenced above are used, some of this information will be apparent from the tool itself, but it is the responsibility of the drinking water officer to ensure that the correspondence provides the information necessary for the water supplier to reasonably understand the requirements. The letter must also indicate the date by which the results of the assessment must be provided to the drinking water officer, and what form of public notice of the assessment is required (see section 21 of the Act).

As a matter of administrative fairness, the drinking water officer must provide the water supplier with an opportunity to make their views known before the decision to order an assessment (including the process for the assessment, form, scope of coverage, time frames etc.) is finalized. Although this consultation may occur though discussions, drinking water officers should also consider sending written correspondence to this effect. Appendix 16 sets out a sample letter for this purpose.

Finally, drinking water officers may consult with water suppliers regarding potential threats and remedial actions, without necessarily ordering a formal assessment under section 19. This may be particularly important for smaller systems with limited financial resources. In such cases, the Drinking Water Source-to-Tap Screening Tool (appendix 13), the Water System Assessment (appendix 14) and the Comprehensive Drinking Water Source-to-Tap Assessment Guideline (appendix 15) can still be used.

Similarly, water suppliers may also be interested in undertaking assessments on their own initiative, and in such cases drinking water officers should consider providing the water suppliers with copies of, or references to, the Drinking Water Source-to-Tap Screening Tool (appendix 13), the Water System Assessment (appendix 14) and the Comprehensive Drinking Water Source-to-Tap Assessment Guideline (appendix 15).

4.2.2.2 Assessment follow-up

The drinking water officer should review each assessment to determine whether it has identified threats to the drinking water provided by the water supply system. If no such threats are identified, no further action is required.

If threats to the drinking water provided by the water supply system are identified, the drinking water officer should consider whether any changes to the terms and conditions of an operating permit are required, or whether an assessment response plan should be prepared (Act, section 22). Section 22(4) of the Act notes that the drinking water officer can require an assessment response plan to include provisions respecting any or all of the following:

(a) Public education and other means of encouraging drinking water source protection;

(b) Guides to best management and conservation practices;[51]

(c) Infrastructure improvements;

(d) Cooperative planning and voluntary programs;

(e) Input respecting local authority zoning and other land use Regulation.

When ordering an assessment response plan, the drinking water officer should ask that the plan set out proposed responses to the threats identified by the assessment. In addition, section 15 of the Regulation requires that all assessment response plans include provisions to identify, eliminate and prevent cross-connections with non-potable water sources.

[51] See appendix 4.

An assessment response plan must be submitted to the drinking water officer, who should review it relative to the threats identified in the assessment. If the drinking water officer is not satisfied the assessment response plan will address the threats, she or he can order the water supplier to review and revise it in accordance with the directions of the drinking water officer.

In every case where an assessment has been completed, the information obtained by the assessment (and the steps to be taken under an assessment response plan, if any) must be included in the appropriate physical file and electronic data storage systems.

4.3 Preventative and remedial action

Under the Act, there is wide range of preventative or remedial actions that can be taken by drinking water officers where a concern is identified. It is important that drinking water officers consider this full range of options and determine which may be appropriate in any particular circumstances. The specific options available, and general considerations of the circumstances in which they may be appropriate, are set out in the sections below.

There are other preventative and remedial actions that may be ordered or undertaken under other legislation that may have a positive impact on drinking water (See Chapter 5, section 5.3). Although drinking water officers will not have authority under those other acts (with a few exceptions to the *Water Act*, discussed in Chapter 5, section 5.3), they should be aware of and consult other agencies in cases when they consider that appropriate.

4.3.1 Amending an operating permit

This option should be used when the drinking water officer believes it is important to change the legal requirements imposed upon a particular water supplier. Amendments can help ensure that the water supplier knows exactly what is required of him or her, and to help ensure that water suppliers understand that taking the action specified is essential to meeting their legal obligations. Amending terms and conditions of an operating permit may also make enforcement action easier in the future, if necessary, as it may be easier to prove a violation of the specific

term and condition of an operating permit, rather than some other potential violations of the Act that are more generally described. (For example, the requirement to provide potable water that is "safe to drinking and fit for domestic purposes without further treatment.").

Any amendment of an operating permit must occur in accordance with section 8(4) of the Act, which requires prior consultation with the water supplier. In any such consultations, the drinking water officer must allow the water supplier to state his or her views as to whether amendments are required. Further, the drinking water officer may wish to discuss and solicit ideas from the water supplier as to the most efficient and effective means of addressing the drinking water officer's concerns if there are a variety of possible ways to do so. The drinking water officer should not avoid amending an operating permit in a manner he or she considers necessary simply because the water supplier may be unwilling to comply, or have difficulty with complying with the amended permit.

4.3.2 Order to review and update emergency response and contingency plan

This option might be appropriate to consider in cases where there is no immediate concern about a drinking water health hazard[52], but there is some concern about the ability of the operator to respond appropriately in emergency situations.

Even if a drinking water officer believes that a review and update of an emergency response and contingency plan is required, it may not be necessary to issue a formal order under the Act in all cases.[53] In practice, it may be sufficient for the drinking water officer to simply discuss the matter with the water supplier and allow the supplier an opportunity to amend the plan.

[52] The term "drinking water health hazard" is defined in section 1 of the Act to mean:
(a) a condition or thing in relation to drinking water that does or is likely to
(i) endanger the public health, or
(ii) prevent or hinder the prevention or suppression of disease,
(b) a prescribed condition or thing, or
(c) a prescribed condition or thing that fails to meet a prescribed standard;

[53] A sample Emergency Response and Contingency Plan can be found in appendix 2 of this guide.

If, however, the drinking water officer believes the water supplier is not likely to review and update the plan voluntarily, the drinking water officer should consider making a formal order under the Act. There is no specific form by which an order must be made, but it should be made in writing and should specifically indicate that it is an order under section 10(2) of the Act.

4.3.3 Order for public notice of threats to drinking water

Under section 14 of the Act, the drinking water officer can request or order a water supplier to give public notice, in the manner approved by the drinking water officer, if:

- The drinking water officer has received a report from a laboratory indicating that an immediate reporting standard is not being met (as per section 12)
- The drinking water officer has received a report from a water supplier concerning threats to drinking water (as per section 13), or
- The drinking water officer considers there is, was or may be a threat to the drinking water provided by the water supply system

The term "threat" is defined very broadly in the Act to mean:

> In relation to drinking water, a condition or thing, or circumstances that may lead to a condition or thing that may result in drinking water provided by a domestic water system not being potable water.

Drinking water officers should engage in dialogue about "public notice" provisions prior to the need for an order (e.g., at a time when no public notice is required). The water supplier is obligated to protect public health from threats to the drinking water (see Act, section 14(2)). The dialogue should seek consensus on the circumstances requiring public notice as well as the manner by which the public notice shall be issued. This dialogue should strive to result in the water supplier issuing a public notice without the need for a drinking water officer to make an order.

The power to order public notice also exists under the hazard abatement and prevention orders section of the Act (section 25(3)(f)). However, the powers under section 25 differ from the powers under section 14 in two important ways:

- An order under section 14 may be issued in the circumstances where the drinking water officer believes there is, was or may be a "threat". By contrast, an order under section 25 can only be made where a drinking water health hazard exists, or there is a significant risk of an imminent drinking water health hazard.
- An order under section 25 is subject to a request for review and reconsideration under section 39.1 of the Act, whereas an order under section 14 is not subject to section 39.1.

4.3.3.1 What is the threshold necessary to request or order public notice?

Generally, public notice of some form may be appropriate when:

- Monitoring indicates:
  - There is detectable fecal coliform or *E-coli* per 100 ml (see Regulation, schedule A)
  - The detectable total coliform levels exceed those permitted under the Regulation for sample frequency (see Regulation, schedule B)
  - Testing has indicated the presence of some other bacteria, viruses or parasites that has a potential to cause health concerns and which may be addressed by boiling the water (such as *Cryptosporidium, Giardia, Campylobacter, Shigella*).
  - A turbidity event is likely to impede a system's capacity to disinfect, or the source of turbidity is related to an event that is likely to introduce pathogenic microorganisms into the water. (see Part B: *Decision Tree for Responding to a Turbidity Event in Unfiltered Drinking Water* of this Guide)
- There is evidence of disease in the community and drinking water is suspected as the source of infection.
- An event has occurred that compromises the treatment and distribution systems, or which compromises the water source that is not reasonably expected to be addressed by the treatment system. These situations could include introduction of substances into water sources, breaks in water pipes, cross connections or natural disasters.
- A water supply system is using untreated surface water or ground water that is at risk of containing pathogens, contrary to section 5 of the Regulation.

This list is not exhaustive and there may be other circumstances in which drinking water officers consider public notice appropriate.[54]

[54] For additional reference materials on issuing boil water notices, see the Health Canada document, *Guidance for Issuing and Rescinding Boil Water Advisories*, found at http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/boil_water-eau_ebullition/index-eng.php

When making decisions about requiring public notice of a threat to drinking water, drinking water officers must always be guided solely by consideration of public health protection. Expense, inconvenience, or other concern of a water supplier or water users is not a sufficient reason to avoid issuing public notice if the drinking water officer considers that necessary to ensure protection of public health. However, drinking water officers should ensure that where they believe the public notice is required, they are able to provide a rationale for this determination.

The drinking water officer should strive for consensus on the need for the order and the specific language of the order with the water supplier. The drinking water officer should provide the water supplier with an opportunity to make their views known and considered where possible, provided that no significant delay occurs on this account that could prejudice public health protection. In addition to meeting the tests of administrative fairness, this approach will, in most cases, result in better relations with the water supplier, and will ensure that public health requirements are dealt with in a manner that addresses the water supplier's interests and concerns to the extent possible in the circumstances.

Drinking water officers should consider consulting with the medical health officer before requiring public notice, unless such consultations cannot be completed immediately and any delay would cause unacceptable risks to public health.

4.3.3.2 Internal communication systems to ensure timely action

All drinking water officers should have an appropriate contact system in place to ensure they can be contacted and take action under section 14 in a timely manner as appropriate. This should include identification of alternate persons who may act in a particular area when the drinking water officer is unavailable.

4.3.3.3 Request or order

Section 14 of the Act provides that the drinking water officer can "request" or "order" that a water supplier provide public notice in certain circumstances.

In general, a request may be appropriate in circumstances where the water supplier is in support of the public notice and is prepared to do so without any formal order. Where the drinking water officer is not sufficiently certain that a water supplier will comply with a request, an order should be used. A failure to comply with an "order" constitutes an offence under section 45(1) of the Act.

A sample form Order Respecting Public Notice is set out in appendix 17. A sample form Request Respecting Public Notice is set out in appendix 18.

Finally, notices may be issued by water suppliers on their own initiative whenever they deem that appropriate, even if a drinking water officer has not requested or ordered that to occur. Water suppliers are required to provide public notice without any request or order by the drinking water office if the water supplier has received a report that an immediate reporting standard is not met or they consider that there may be a drinking water health hazard in relation to the drinking water and they are not able to immediately contact a drinking water officer (Act, section 14(2)).

4.3.3.4 Type of notice

In the past, public health officials have implemented some form of boil water advisory when testing indicated the presence of fecal coliform or *E-coli*. However, some concerns have been expressed about this practice, including the following:

- Different regions used different, and at times inconsistent, terminology (e.g. boil water advisories, boil water notices, water use advisories) so the public had difficulty understanding the specific meaning and consequences of such notice
- A zero tolerance policy was adopted that resulted in boil water advisories or notices being issued in circumstances where some questioned the need for that step to be taken

- Boil advisories or notices are not in any event sufficient to address threats that are not neutralized by boiling

Given these concerns, and the fact that section 14 of the Act (and section 25, discussed below) provides broad discretion to drinking water officers regarding the type of public notice required, drinking water officers should consider use of the following range of public notice options, and should require whichever is appropriate to the facts of a particular case. If the drinking water officer believes some other form of notice should be used, he or she should request or order this, but should be able to rationalize the decision to require some form of notice other than those set out below.

Water Quality Advisory

A "Water Quality Advisory" should be used where a drinking water officer determines there is some level of risk associated with water use, but the circumstances do not warrant a "Boil Water Notice" or "Do Not Use Water Notice", discussed below. A Water Quality Advisory should specify the nature of the risk presented, steps that the water supplier is taking or is required to take to address them, and steps that water users may take in the meanwhile to minimize the risk associated with that water.

A sample form of Water Quality Advisory and the information to be included in it is set out in appendix 19.

Boil Water Notice

A "Boil Water Notice" should be used when a drinking water officer determines that there is a risk associated with consumption of water, and that risk can be adequately addressed by boiling the water in accordance with the notice, prior to human consumption. The notice should contain specific instruction regarding boiling requirements, and the steps that the water supplier is taking or is required to take to address the risks that exist other than through use of the boil water notice.

A sample form of Boil Water Notice and the information to be included in it is set out in appendix 20.

Do Not Use Water Notice

A "Do Not Use Water Notice" should be used when a drinking water officer identifies there is a risk associated with consumption of water, and that risk cannot be adequately addressed by boiling the water or issuing a Water Quality Advisory. This might include, for example, circumstances in which unacceptable levels of nitrates or lead are detected in the water, or where there is concern that a water system may have been subject to vandalism, accidents (such as chemical spills) or natural events such as mudslides or earthquakes. In some cases, it may be appropriate for the notice to specify those specific types of water use that are not acceptable (e.g. in some circumstances it may be acceptable to use water for showering, but nor for human consumption.)

A sample form of Do Not Use Water Notice and the information to be included in it is set out in appendix 21.

Guidance for determining appropriate form of notice

In deciding which form of notice to require, the drinking water officer must conduct a risk assessment. This should be undertaken in consultation with the medical health officer and other public health officials the drinking water officer considers appropriate. It should involve consideration of all relevant matters. This may include, but is not limited to, matters such as:

- The degree to which it has been determined that a health hazard does exist in relation to the water (e.g., has only one of numerous samples indicated a low presence of fecal coliform, or presence of *E. coli*, is presence found in multiple samples, or is the presence at a high level even if only one sample?)
- The severity of harm that may result from consumption of the water in question
- The degree to which each type of notice would serve to address the threat
- Past history of the water source and water supply system in question
- Recent operational factors

Some of the specific issues typically considered by officials that may fall within the above noted principles include:

Background

- Type of water system
- Type of treatment
- Integrity of water supply system
- Size of system - number of connections
- Population served - type

Operational Information

- Certified operators
- Operations history
- Cross connection control
- Age of infrastructure
- Water conservation requirements
- Fire flow requirements
- Potential to isolate parts of water system
- Time involved for complete changeover of water
- Significant deterioration in source water quality
- Equipment malfunction during treatment or distribution
- Situations where operation of the system would compromise public health

Monitoring Information

- Known or suspected communicable disease outbreak in community
- Recent raw water quality events
- Monitoring records
- Chlorine residual records
- Turbidity records
- Public health inspector /drinking water officer inspection
- Public health engineer inspection
- Inadequate disinfection or disinfection residuals
- Unacceptable microbiological quality
- Unacceptable turbidities or particle counts

Sampling Information

- Sample location
- Sampling procedures and changes
- Sample shipping
- Re-sampling time element
- Lab certification
- Confidence in lab results
- Number of samples taken/available
- New Sampler

Seasonal Information

- Weather conditions

- Drought conditions

4.3.3.5 Process for ensuring compliance with a public notification order

Given the importance of public notice to the protection of public health, drinking water officials should develop and document a plan for ensuring implementation of all public notification orders issued under sections 14 or 25. The specific measures that will be appropriate may vary with individual cases, depending on the nature of the risk, the vulnerability of the population at issue and other relevant factors. As such, it is ultimately for the drinking water official to decide what steps are appropriate. In making this decision, drinking water officials should consider the following possible steps, as well as any others they may consider appropriate:

- Contacting people within the affected community to determine if they have received notification
- Visiting the affected community at the earliest opportunity (and in any case no more than 48 hours after the order is issued) unless timely physical attendance is impracticable. In the latter case, other means should be explored to obtain the type of information that would have normally been obtained from personal attendance (such as requesting a local government official to attend and advise the drinking water officer of the results).

Drinking water officials should document all steps taken to ensure compliance with a public notification order.

Where non-compliance with a public notification order is found, the drinking water officer should take other remedial compliance action in accordance with this Guide. The drinking water officer should also consider alternate means to ensure public notification occurs in a timely manner, such as posting information on the health authority's website, alerting local governments and media or providing information directly to affected persons.

4.3.3.6 Rescinding public notification orders

In assessing whether a public notification order should be rescinded, the drinking water officer should consider, in consultation with the medical health officer and other public health officials as appropriate:

- Whether the problem or threat has been fully identified
- Whether the problem or threat has been resolved
- Whether the relevant microbiological quality, turbidity, particle counts or disinfectant residual of the treated water in at least two consecutive sets of samples has returned to an acceptable level;
- Whether sufficient water changeover or flushing has occurred in the distribution system to eliminate any remaining contaminated water.[55]

When the drinking water officer determines that a public notification order may be rescinded, the drinking water officer should communicate that decision to the water supplier.

To minimize any potential for misunderstanding about whether and when an order has been rescinded, drinking water officers should ensure that all parties are aware that the order will remain in force unless and until it is rescinded in writing. A statement to this effect should be included in the original order.

4.3.4 Order flood proofing of well

Section 16(1) of the Act and section 14 of the Regulation provide that wells that supply water to a drinking water supply system must be flood proofed if they are identified in an assessment (under section 19) as being at risk of flooding. In some cases, other wells may also have the potential to affect the water supply system in question. Drinking water officers can also require flood proofing of those other wells (see section 16 (2)).

In addition to the drinking water officer's ability to order flood-proofing of wells under section 16 of the *Drinking Water Protection Act*, the well protection provisions of the *Water Act* and *Ground Water Protection Regulation* may also be relevant (see Chapter 5, section 5.3 of this Guide).

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[55] For additional reference materials on rescinding boil water notices, see the Health Canada document, *Guidance for Issuing and Rescinding Boil Water Advisories*, found at http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/boil_water-eau_ebullition/index-eng.php

4.3.5 Hazard abatement and prevention orders

These powers are found in section 25 of the Act. It contains a broad range of orders that can be made when the drinking water officer has reason to believe that a drinking water health hazard exists, or there is a significant risk of an imminent drinking water health hazard (section 25(1)).

Such orders can be made against any person who falls within the terms of section 25(2), and must be served on the person (see section 25(4) and 46 regarding service).

The range of remedies that can be ordered is set out in section 25(3).

Although there are no specific requirements in the Act to provide prior notice to a person before a hazard abatement or prevention order is issued, this should be done in any case where it can be done without significant threat to public health. In cases where a delay would cause significant risks to public health, the order should be made immediately, but the person should, immediately thereafter, be given an opportunity to present their views as to whether the order is required, and whether the specific requirements of the order are appropriate in the circumstances.

Hazard abatement and prevention orders can, in urgent situations, be issued orally, to be following in writing as soon as possible thereafter (section 25(7)).

If the person to whom the order is addressed fails to take the action required, then the drinking water officer can, under section 27, take further steps to ensure it occurs. This is discussed further below in section 4.3.8.

A sample of a hazard abatement and prevention order is set out in appendix 22.

(Note: Section 25(5) and (8) – (10) contain other provisions respecting contravention Orders that might potentially be relevant in some cases, and must be considered any time an Order is issued.)

Violations of orders under section 25 can be made the subject of a violation ticket. As such, enforcement action can be taken without the need to prepare a report to Crown Counsel and without the need for any approval by Crown Counsel to pursue charges in court.

4.3.6 Orders under the Public Health Act

Section 2(2) of the Act states:

> Nothing in this Act affects the powers, duties and functions of a medical health officer under the *Public Health Act* or any other enactment

Consequently, any of the powers that a public health official holds under the *Public Health Act* continue in respect of drinking water matters, if the relevant provisions of the *Public Health Act* are applicable to the facts of the case.

One of the most significant parts to consider in this regard is Division 4 of Part 4 of the *Public Health Act*.

4.3.6.1 When orders respecting health hazards and contraventions may be made

30 (1) A health officer may issue an order under this Division only if the health officer reasonably believes that

(a) a health hazard exists,

(b) a condition, a thing or an activity presents a significant risk of causing a health hazard,

(c) a person has contravened a provision of the Act or a regulation made under it, or

(d) a person has contravened a term or condition of a licence or permit held by the person under this Act.

(2) For greater certainty, subsection (1) (a) to (c) applies even if the person subject to the order is complying with all terms and conditions of a licence, a permit, an approval or another authorization issued under this or any other enactment.

4.3.6.2 General powers respecting health hazards and contraventions

31 (1) If the circumstances described in section 30 *[when orders respecting health hazards and contraventions may be made]* apply, a health officer may order a person to do anything that the health officer reasonably believes is necessary for any of the following purposes:

(a) to determine whether a health hazard exists;

(b) to prevent or stop a health hazard, or mitigate the harm or prevent further harm from a health hazard;

(c) to bring the person into compliance with the Act or a regulation made under it;

(d) to bring the person into compliance with a term or condition of a licence or permit held by that person under this Act.

(2) A health officer may issue an order under subsection (1) to any of the following persons:

(a) a person whose action or omission

(i) is causing or has caused a health hazard, or

(ii) is not in compliance with the Act or a regulation made under it, or a term or condition of the person's licence or permit;

(b) a person who has custody or control of a thing, or control of a condition, that

(i) is a health hazard or is causing or has caused a health hazard, or

(ii) is not in compliance with the Act or a regulation made under it, or a term or condition of the person's licence or permit;

(c) the owner or occupier of a place where

(i) a health hazard is located, or

(ii) an activity is occurring that is not in compliance with the Act or a regulation made under it, or a term or condition of the licence or permit of the person doing the activity.

4.3.6.3 Specific powers respecting health hazards and contraventions

32 (1) An order may be made under this section only

(a) if the circumstances described in section 30 *[when orders respecting health hazards and contraventions may be made]* apply, and

(b) for the purposes set out in section 31 (1) *[general powers respecting health hazards and contraventions]*.

(2) Without limiting section 31, a health officer may order a person to do one or more of the following:

(a) have a thing examined, disinfected, decontaminated, altered or destroyed, including

(i) by a specified person, or under the supervision or instructions of a specified person,

(ii) moving the thing to a specified place, and

(iii) taking samples of the thing, or permitting samples of the thing to be taken;

(b) in respect of a place,

(i) leave the place,

(ii) not enter the place,

(iii) do specific work, including removing or altering things found in the place, and altering or locking the place to restrict or prevent entry to the place,

(iv) neither deal with a thing in or on the place nor dispose of a thing from the place, or deal with or dispose of the thing only in accordance with a specified procedure, and

(v) if the person has control of the place, assist in evacuating the place or examining persons found in the place, or taking preventive measures in respect of the place or persons found in the place;

(c) stop operating, or not operate, a thing;

(d) keep a thing in a specified place or in accordance with a specified procedure;

(e) prevent persons from accessing a thing;

(f) not dispose of, alter or destroy a thing, or dispose of, alter or destroy a thing only in accordance with a specified procedure;

(g) provide to the health officer or a specified person information, records, samples or other matters relevant to a thing's possible infection with an infectious agent or

contamination with a hazardous agent, including information respecting persons who may have been exposed to an infectious agent or hazardous agent by the thing;

(h) wear a type of clothing or personal protective equipment, or change, remove or alter clothing or personal protective equipment, to protect the health and safety of persons;

(i) use a type of equipment or implement a process, or remove equipment or alter equipment or processes, to protect the health and safety of persons;

(j) provide evidence of complying with the order, including

(i) getting a certificate of compliance from a medical practitioner, nurse practitioner or specified person, and

(ii) providing to a health officer any relevant record;

(k) take a prescribed action.

(3) If a health officer orders a thing to be destroyed, the health officer must give the person having custody or control of the thing reasonable time to request reconsideration and review of the order under sections 43 and 44 unless

(a) the person consents in writing to the destruction of the thing, or

(b) Part 5 *[Emergency Powers]* applies.

4.3.6.4 Ordering others to comply and entering to take action

33 (1) If a health officer is not satisfied that a person is adequately complying with, or has adequately complied with, an order, the health officer may

(a) if the person is the owner of the place in respect of which the original order was issued, order an occupier of the place to comply with the original order,

(b) if the person is an occupier of the place in respect of which the original order was issued, order the owner of the place to comply with the original order, or

(c) take action to prevent or remove, or mitigate the harmful effects of, the health hazard that is the subject of the original order, including authorizing a person to carry out work on behalf of the health officer.

(2) Subject to subsection (3), a health officer who has issued an order, or a person acting on behalf of the health officer, may enter on or into a place that is subject to the order for the purpose of taking an action under subsection (1) (c).

(3) Section 25 *[entering to inspect]* applies to entry under subsection (2) as if the health officer, or the person acting on behalf of the health officer, were making an inspection of the place.

4.3.6.5 Dutys to comply with orders

42 (1) A person named or described in an order made under this Part (Part 4) must comply with the order.

4.3.6.6 Violations of orders under Part 4 of the Public Health Act

Violations of orders under Part 4 of the Public Health Act can be made the subject of a violation ticket. As such, enforcement action can be taken without the need to prepare a report to Crown Counsel, or the need for any approval by Crown Counsel to pursue charges in court.

4.3.7 Direct action by drinking water officer

In some cases, the test for issuing a hazard abatement and prevention order may be met, but there is no person against whom an order under section 25 can appropriately be made. In these circumstances, section 28 of the Act specifically authorizes the drinking water officer to take actions to address the health hazard or to authorize a water supplier or other person to do this. This section is very similar to the power to order remedial action under section 27 of the Act (see section 4.3.8 of this guide), but actions under section 28 can be taken immediately, without the requirement of first determining that a person named in an order is in default.

Where action is taken under section 28 of the Act, the cost recovery provisions of sections 27(3) and (4) of the Act apply. However, given that the powers of this section are to be used only when the drinking water officer is not aware of a person against whom a hazard abatement and prevention order can be made, there may be little practical ability to seek cost recovery in these circumstances.

Drinking water officers should consult with their senior manager and the appropriate spending authority within the health authority before expending funds through direct action under section 28.

4.3.8 Action in default

Section 27 of the Act provides that, if a person does not comply with a hazard abatement and prevention order (or a contravention order, as discussed below), the drinking water officer may advise the person that if they fail to take the action required, the drinking water officer can direct someone else to enter onto the property to do the work.

Where notice is given under section 27, before further steps are taken to remedy the matter, the drinking water officer should give the person reasonable time to respond. The amount of time that will be considered reasonable will depend on the circumstances and the nature of the threat posed, and is a matter for the drinking water officer's discretion.

Notice under section 27 should be given in writing wherever possible. If, however, it would cause unacceptable delay and risks to public health to provide notice in writing, then verbal notice should be given, with written notice to follow as soon as possible thereafter. A sample letter advising of that steps may be taken under section 27 is set out in appendix 23.

When a person becomes aware of the potential consequences to them under section 27, they may be more inclined to take the remedial action required. If, however, the person still refuses to take the action required, then the drinking water officer can authorize a person to go onto the property and do the work (section 27(3)). The Act does not specify who such a person may be, and it could be either a person employed by the health authority, or a third party.

Although subsection 3 allows the person who has done the work to claim the costs against the person to whom the order was made, in practice, it is not likely that a third party contractor will be prepared to undertake the work solely on the basis of the right to claim against the party that has refused to take the action required. In such cases, section 27 may only provide a practical

remedy if the health authority is prepared to directly undertake the work, or to fund the third party contractor, and then seek costs against the person to whom the order was made.

Drinking water officers should discuss with their senior manager situations that may warrant action under section 27. Drinking water officers must also consult with the appropriate spending authority within the health authority before expending funds under section 27.

4.3.9 Cost recovery by health authority

If the health authority takes or funds action under section 27, its ability to recover costs is not limited to recovery through court proceedings. Rather, subsection 4 provides that the costs and expenses may be recovered in accordance with section 35 of the *Public Health Act*:

4.3.9.1 Recovery of costs by health authorities

35 (1) If a health officer or health authority does work or contracts for work to be done under section 33 (1) (c) *[ordering others to comply and entering to take action]*, the health officer or health authority may recover reasonable costs from the person who was subject to the original order by filing a certificate in the prescribed form in the Supreme Court.

(2) A certificate must be filed within 2 years of the work being done.

(3) A certificate must be signed by the health officer or the corporate executive officer of the health authority or his or her delegate, and must include all the following information:

(a) the details of the original order, including the date it was issued;

(b) the total amount owing;

(c) the name of the person who was subject to the original order;

(d) the date the costs were incurred, and the manner in which they were incurred.

(4) Subject to the regulations, a certificate has the same effect, and proceedings may be taken on it, as if it were a judgment of the Supreme Court for the recovery of a debt in the amount stated against the person who was subject to the original order.

(5) A certificate is

(a) admissible in any proceedings to recover the certified debt without proof of the signature or official position of the person appearing to have signed the certificate, and

(b) proof of the certified facts.

(6) A copy of the filed certificate must be served in the prescribed manner on the person who was subject to the original order.

(7) A person who has been served with a copy of the filed certificate under subsection (6) may, within 30 days of being served, request the Supreme Court to review, in accordance with the regulations, the amount owing.

(8) After reviewing the amount owing, the Supreme Court may rescind or modify the certificate if satisfied that the amount owing is not reasonable.

Cost recovery under section 27 of the Act is an option that is not frequently required or used. If a drinking water officer believes it may be appropriate to explore use of this option in a particular case, he or she should discuss the matter with the senior manager before taking any action in this regard.

4.3.10 Orders respecting contraventions

Section 26 of the Act sets out circumstances in which a drinking water officer can make an order directing a person to comply with the Act or regulations. It can be made if the drinking water officer has reason to believe that the person is in contravention of the Act or regulations. The section also sets out process for issuing such an order.

A contravention of the Act is an offense even in the absence of a contravention order. However, contravention orders further clarify and confirm the nature of an alleged contravention, and the specific action that the drinking water officer requires for the person to come into compliance with the Act and regulations. As such, they can be important tools for ensuring a person understands the gravity of a matter and for securing compliance. They may also assist in establishing an appropriate record for cases where further compliance action, including prosecution, is required. However, a contravention order does not itself institute any form of

charge and court proceeding. Such proceedings may be initiated through a report to Crown Counsel and related decision by Crown Counsel to pursue charges for an offence. Violations of orders under section 26 can be made the subject of a violation ticket. As such, enforcement action can be taken without the need to prepare a report to Crown Counsel, and without the need for any approval by Crown Counsel to pursue charges in court.

A contravention order, like a hazard abatement and prevention order, can be made the subject of the "action in default" provisions of section 27, discussed in section 4.3.8 of the guide, if the person to whom it is addressed does not undertake the action required.

A sample form contravention order is set out in appendix 24.

4.3.11 Drinking water protection plans

In circumstances where monitoring or assessment results indicate a potential threat to drinking water that may result in a drinking water health hazard, and no other practicable measures are available under the Act to address or prevent the drinking water health hazard, a drinking water protection plan may be initiated under part 5 of the Act.

The decision whether to initiate a drinking water protection plan is one for the minister to make, upon recommendation of the provincial health officer (section 31 of the Act). Although the drinking water officer does not have authority to initiate a drinking water protection plan on his or her initiative, section 31(3) provides that the provincial health officer must consider whether to make a recommendation to the minister to initiate a drinking water protection plan if requested to do so by a drinking water officer.

Drinking water officers must consider all other options available under the Act before requesting the provincial health officer to consider recommending a drinking water protection plan. A drinking water officer should, however, make such a request in circumstances where he or she considers it appropriate. Drinking water officers should, particularly, be familiar with the types of matters that can be considered in a drinking water protection plan (see section 32), as well as

the steps that can be taken to implement a drinking water protection plan once developed (see sections 35 – 38). These are significant powers that can be used to address complex and multifaceted drinking water protection problems as necessary.

There is no ability under the Act to allow people other than drinking water officers to request the provincial health officer to recommend that a plan be developed. However, section 31(4) provides that a local authority or water supplier can request a drinking water officer to make a request to the provincial health officer. If the drinking water officer is asked by a local authority or water supplier to do so, the drinking water officer must consider the request and should provide reasons as to whether or not a request will be made to the provincial health officer. If the request is made by a person other than a local authority or a water supplier, the person should be advised of the limits of section 31 (4) and advised that they should pursue the matter with the local authority and/or water supplier.

4.3.12 Reports of problems relating to provincial government action

Section 4.2 of the Act contains a unique provision respecting accountability for government action. Specifically, it provides that the provincial health officer must report to the minister on any situation that, in the opinion of the provincial health officer, significantly impedes the protection of public health in relation to drinking water and which arises in relation to the actions or inactions of government or government agencies.[56]

If a drinking water officer is aware of any situation in which it might potentially be appropriate for the provincial health officer to report to the minister under this section, the drinking water officer should discuss the situation with the senior manager and the medical health officer, who may wish to advise the provincial health officer accordingly.

[56] The regional drinking water teams may provide a venue for solving interministerial issues at a local level.

4.3.13 Problem systems

4.3.13.1 Systems where ownership responsibilities are not clear or no apparent owner exists

One of the most challenging situations facing drinking water regulators is systems for which no apparent owner exists, and for which some form of action or improvement to the system is required to address threats to drinking water. In addressing these situations, it is important to remember that the definition of an "owner" of a water supply system in section 1 of the Act is broad, and it is not exhaustive. This means that there may be some people who, in specific circumstances, might be considered an "owner" under the Act, even if they might not be considered an owner in the common use of that term.

If a drinking water officer is uncertain as to who is an "owner" of the system as that term is defined in section 1 of the Act, the drinking water officers should contact the users of the system, asking them for information in this regard. This may be done verbally, or in writing. Where this is done in writing, drinking water officers may wish to consider using the sample letter set out in appendix 25.

If the drinking water officer identifies a person that the drinking water officer believes may fall within the definition of owner in the Act, but the person is not aware of this or is unwilling to acknowledge this responsibility, the drinking water officers should advise the person, indicating the tentative position of the drinking water officer in this regard, and asking the person to provide their views in respect of the matter. This may be done verbally, or in writing. Where this is done in writing, drinking water officers may wish to consider using the sample letter set out in appendix 26.

In any case where a drinking water officer is not able to determine any owner in relation to a system, he or she should discuss the matter with the senior manager. The purpose of such consultations would be to confirm that there is no "owner" for the purposes of the Act and, if there is no legal "owner", to consider possible options and strategies for addressing public health threats in relation to that system.

While owners are the persons ultimately responsible for ensuring a system complies with the Act, this does not mean that remedial action under the Act can only be directed at owners. Rather, the hazard abatement and prevention orders under section 25 can, in appropriate cases, be directed at persons other than owners (discussed in section 4.3.5 of the guide).

4.3.13.2 Systems for which the owner is unable or unwilling to address the concerns

In situations where an owner is identified, but the owner is unable or unwilling to take the remedial action required, the drinking water officer should draw to the owner's attention his or her obligations under the Act, as well as the potential actions that can be taken in relation to them. Generally, this information should be provided in writing. It should be provided not for the purposes of in any way threatening the owner, but to ensure that he or she is fully aware of their obligations. The person should also be advised that the drinking water officer is not willing or able to simply avoid taking action on the basis that there may be negative financial consequences for various parties.

Providing this information in writing to water suppliers may help those persons better understand the nature and extent of their obligations, and the consequences of failure to comply. Equally importantly, it may also assist water suppliers in engaging in discussions with the users of the system, with the view towards finding an acceptable means of addressing and funding the concerns with the water system.

While drinking water officers must not assume responsibility for solving all problems associated with water systems and the funding of them, the drinking water officers may consider providing basic referrals and information if that would be of assistance to people in certain situations. For example, this may include:

- Referring owners and water users to the local government to consider if there is a potential for the system to be taken over by the local government, with funding to be amortized over the long term through mechanisms such as the establishment of a local service area under Part 7, Division 5 of the *Community Charter*, or other such options

- Referring the owners and water users to the Ministry of Community, Sport and Cultural Development to determine whether there is any potential for the water system to apply for financial assistance under the Canada / BC infrastructure program, if the systems were to be taken over by a local government
- Providing basic information about possible types of water systems and treatment systems, and recommending consultation with vendors of water supply / treatment systems, or professional engineers (without recommending particular vendors or suppliers)

4.3.13.3 Systems for which no operating or construction permit has ever been issued

Construction or operation of a water supply system without an applicable permit may constitute a violation of the Act[57] and should be addressed in accordance with the Health Authority's compliance policy.

The appropriate response under the compliance policy will depend on various factors such as the degree of threat to public health, history of the conduct of the water supplier, and the willingness of the water supplier to bring the system into compliance with the Act and Regulation.

Options for response may include:

- Informal discussions and education
- Contravention order (see section 4.3.10 of this Part)
- Charge for an offence (see section 4.4.1 of this Part)
- In the case of failure to obtain construction permits, consideration of terms and conditions on operating permits to address any outstanding concerns that may exist as a result of the failure to obtain the construction permit.

In addition, in cases where the lack of compliance results in a threat to public health, the drinking water officer should consider the actions discussed in sections 4.3.3 (public notice of threats), 4.3.5 (hazard abatement and prevention), 4.3.7 (direct action by drinking water officer), 4.3.8 (action in default) and 4.3.9 (cost-recovery) of this Chapter of this Guide.

[57] Whether there is a violation of the requirement for a construction permit may depend on when the system was constructed, and whether a waiver has been issued

In any case where a drinking water officer is dealing with a system that came into or is in existence without the necessary construction or operating permits, the drinking water office must make clear that the system is considered to be in violation of the Act. Additionally, it should be made known that in determining an appropriate response and working to bring the system into compliance, the drinking water office is not in any way accepting or sanctioning the non-compliance for any period of time.[58]

If any legal questions arise regarding the status or appropriate means for dealing with such systems, the drinking water office should consider consulting legal counsel, in accordance with the Health Authority's policies in that regard.

4.3.13.4 Problem systems which involve Point-of-Entry or Point-of-Use treatment

Water supply systems that supply water to Point-of-Entry and Point-of-Use treatment systems are exempt from the requirements of section 6 of the Act (potable water) provided the Point-of-Entry or Point-of-Use systems make the water potable (see Regulation section 3.1(a)). However, these water systems do remain subject to other provisions of the act.[59] As such, questions may arise concerning the relationship between the water supplier and the end users of Point-of-Entry / Point-of-Use systems in cases where problems arise. The following principles may assist drinking water officers in determining an appropriate course of action in such cases:

- Even where the exemption from section 6 of the Act applies, the water supplier is still covered by other applicable sections of the Act. This includes the requirement to hold an operating permit (section 8), and the requirement to monitor (section 7);
- If the water supplier is providing water to Point-of-Entry or Point-of-Use systems that do not provide potable water, the water supplier may lose the exemption from section 6 of the Act because he or she is no longer providing water to a Point-of-Entry or Point-of-Use device "that makes the water potable". It is necessary to avail oneself of the exemption in section 3.1(a) of the Regulation, and that in certain cases, the water supplier

[58] For help in finding unregulated systems, see Part B: *Strategies, Tools And Procedures That Health Authorities May Use To Find And Regulate Small Systems* of this Guide for more detail.
[59] See Part B: *Obligations of the Water Suppliers of Drinking Water Treatment Systems that have Point of Use/Point of Entry Devices* of this Guide for more details.

could be subject to a contravention order in this regard, or some other remedial order. The decision whether to issue such an order is one to be made by the drinking water officer using his or her discretion. This may involve consideration of issues such as whether, or to what degree the lack of potability at the end point relates to actions or inactions of the water supplier as opposed to the end user, and whether other steps are being or could be taken to address any public health threats (such as installation of a centralized treatment system); and,

- Where the water being used through a Point-of-Entry or Point-of-Use system may present a health hazard, the drinking water officer has all the powers available under section 25, 27 and 28 and related orders can be made against the water supplier and / or the end user(s) as appropriate to the facts of any particular case. This is ultimately a matter for the drinking water officer's discretion.

4.3.14 Systems with significant source protection issues

The multi-barrier approach to drinking water protection begins at the water source, and this can raise complex questions regarding the relationship between the Act and Regulation and other legislation, including potentially complex and controversial issues associated with competing land use decisions. This is particularly for situations in which limiting activities to protect a water source would benefit a water supplier and users of a water supply system, but might have adverse consequences for other parties.

The Act recognizes the important but complex relationship between source protection and the safe and effective operation of water supply systems and, while it does not wholly displace responsibilities held by officials under other legislative regimes, it includes a number of provisions that must be considered by drinking water officers where source protection presents challenges in respect of a water supply system. Many of these provisions are discussed in other sections of this Guide, but for ease of reference, the following are some of the options or steps that drinking water officers should consider and pursue as appropriate when source protection issues exist.

- Ordering that a water source assessment be completed under section 19 of the Act, particularly given that section 18(2)(a) indicates that one purpose of an assessment is to identify, inventory and assess the drinking water source for the water supply system, including land use and other conditions and activities that may affect that source. (See Chapter 4, section 4.2.2 of this Guide)

- Designation by regulation of other officials that must report to the drinking water officer anything that may be a threat to drinking water under section 24(2) of the Act. (See Chapter 4, section 4.1 of this Guide)
- Designation by regulation (by area or generally) of decisions under other acts that can only be made after consultation with drinking water officer, local authorities and water suppliers. (See Act, section 30)[60]
- Under Part 5 of the Act, order the establishment of a drinking water protection plan, which can result in a wide range of potential outcomes including restricting the exercise of statutory decisions under other acts.
- Recommending that provincial health officer make a report to the minister about problems respecting provincial government action. (See Chapter 1, section 1.5 of this Guide)

These provisions complement, but do not replace, informal consultation among agencies and individuals involved in drinking water protection issues.

Other ministries and agencies may also have statutory responsibilities that are relevant to addressing source protection issues. Some of these are discussed below in Chapter 5, sections 5.3 and 5.4 of this Guide. Drinking water officers should consider these and consult with other interested ministries and agencies in cases where source protection issues may be of interest to them.

4.4 Dealing with non-compliance

Compliance activities are generally considered to fall into a continuum that includes education, warnings, requiring remedial action, and enforcement. Regulators frequently develop compliance policies and strategies based on the compliance continuum such as a "graduated enforcement" approach. In exercising the authorities discussed in this section, officials should consider and apply any general compliance policies and strategies that have been developed by the applicable health authority or the province in respect of public health matters.

[60] No such regulations have been developed to date. If drinking water officers are aware of situations that may warrant development of regulations in this regard, they should consult the senior manager so that recommendations may be made to the ministry as appropriate.

4.4.1 Charge for offence

All violations of the Act, Regulation, permits, orders and directions of a drinking water officer constitute an offense under section 45(1) of the Act. It is also a violation of the Act to provide false or misleading information, or to hinder, obstruct, impede, or otherwise interfere with a drinking water officer, delegate or issuing official in the performance of their duties or the exercise of their powers (section 44).

Persons convicted of an offense are liable to a fine of up to $200,000, or imprisonment for up to 12 months, or both. In addition, where an offense is a continuing offense, the maximum fine of $200,000 can be applied to each day the offense is continued.

Charging a person for an offense is, in most cases, the last option that a drinking water officer would consider as part of the spectrum of compliance options. However, it is important that drinking water officers consider and pursue prosecution for an offense in appropriate cases.

Where a drinking water officer believes it may be appropriate to charge a person with an offense, they should discuss the matter with legal counsel. The drinking water officer must ensure that the case is fully investigated, that appropriate evidence is assembled, and that a report is made to crown counsel in an appropriate form. Information regarding the appropriate form of report may be obtained by speaking with Crown Counsel, or with the health authority's legal counsel.

If a person is convicted of an offense under the Act, there are a wide range of additional things that a court may order in relation to the offense beyond the fine and imprisonment. Specifically, section 45(3) of the Act states that section 107 of the Public *Health Act* applies in relation to an offense under this Act. Section 107of the *Public Health Act* allows a court to impose a range of orders to ensure remedial action and prevent future non-compliance. It states:

> **107** (1) To give effect to the purposes of sentencing as set out in section 106 *[purposes of sentencing]*, a sentencing judge may order a person convicted of an offence under this Act to do one or more of the following:

(a) do a thing, or not do a thing, as set out in a joint submission under section 105 *[determining sentence]*;

(b) take any action the court considers appropriate to remedy or avoid a health hazard or health impediment caused by the commission of the offence;

(c) pay a person an amount of money as compensation, in whole or in part, for the cost of a remedial or preventive action taken by or on behalf of the person as a result of the commission of the offence;

(d) perform community service for a period of up to 3 years;

(e) not do any act or engage in any activity that may, in the opinion of the court, result in the continuation or repetition of the offence or the commission of a similar offence under this Act;

(f) comply with any conditions that the court considers appropriate for preventing the person from continuing or repeating the offence or committing a similar offence under this Act;

(g) submit to the minister or a health officer information respecting the activities of the person that the court considers appropriate in the circumstances, for a period of up to 3 years;

(h) if the person is a corporation, designate a senior official within the corporation as the person responsible for monitoring compliance with the Act or the regulations made under it, or the terms or conditions of a licence or permit held by the corporation under this Act;

(i) develop guidelines or standards in respect of a matter, implement a process, or do another thing, for the purposes of preventing the person from continuing or repeating the offence, or committing a similar offence;

(j) make available, either free of charge or for a fee, to another person or class of persons guidelines or standards developed under paragraph (i), in any manner and under any conditions the court considers appropriate, for up to 3 years from the date by which the guidelines or standards must be developed;

(k) publish, in any manner the court considers appropriate, the facts relating to the commission of the offence and any other information the court considers appropriate;

(l) post a bond for an amount of money the court considers appropriate for the purpose of ensuring compliance with a prohibition, direction or requirement under this section;

(m) submit to inspections, submit samples or analyses, or do any other thing necessary to permit a health officer or other person specified by the court to monitor compliance, for a period of up to 3 years, with an order made under this section.

(2) For the purposes of subsection (1) (j), the court may set or limit the amount of the fee, or put conditions on the charging of the fee.

Drinking water officers should keep the provisions of section 107of the *Public Health Act* in mind when deciding whether it is appropriate to seek to charge a person for an offense under the Act.

4.4.1.1 Limitation period

Section 45(6) of the Act provides that, if a person is to be charged with an offense, this must be done within two years after the facts on which the charge is based first came to the knowledge of a drinking water officer.

Also drinking water officials should be aware that, at least in some cases, unnecessary delay in pursuing a charge can have negative impacts on the ability to have that charge prosecuted (even if the charge is brought within 2 years). Therefore, where drinking water officers conclude that prosecution may be appropriate, they should provide a report to Crown Counsel as soon as all the necessary information has been obtained.

If drinking water officers have any question regarding the application of the two year limitation, or questions about what may constitute unreasonable delay on the facts of particular cases, they should consult legal counsel.

4.4.2 Violation tickets

Several drinking water-related offences under the *Drinking Water Protection Act* and *Public Health Act* have been designated as offenses for which a ticket can be issued under the *Offence Act* and the Violation Ticket Administration and Fines Regulation. The following is a listing of these offences and their related fines.

Provision	Contravention	Fine	Victim Surcharge Levy	Ticketed Amount
Drinking Water Protection Act				
section 7 (2) (a)	Construct water supply system without permit	$500	$75	$575
section 7 (2) (a)	Construct works, facilities or equipment without permit	$500	$75	$575
section 7 (2) (b)	Construct water supply system contrary to terms of permit or regulations	$500	$75	$575
section 7 (2) (b)	Construct works, facilities or equipment contrary to terms of permit or regulations	$500	$75	$575
section 8 (1) (a)	Operate water supply system without permit	$500	$75	$575
section 8 (1) (b)	Operate water supply system contrary to terms of permit	$500	$75	$575
section 8 (1) (c)	Operate water supply system in violation of regulations	$500	$75	$575
section 9 (1) (a)	Operate, maintain or repair water supply system without being qualified	$300	$45	$345
section 9 (1) (b)	Operate, maintain or repair water supply system without supervision of qualified person	$300	$45	$345
section 11	Fail to comply with water monitoring requirements established by permit or regulations	$500	$75	$575
section 14	Fail to comply with order to provide public notice of a drinking water threat	$500	$75	$575
section 23 (1)	Contaminate drinking water	$500	$75	$575
section 23 (2)	Tamper with water supply system	$500	$75	$575
section 25	Fail to comply with hazard abatement or prevention order	$500	$75	$575
section 26	Fail to comply with an order respecting a contravention	$500	$75	$575
***Drinking Water Protection Act* – Drinking Water Protection Regulation, B.C. Reg. 200/2003**				
section 5 (2) (a)	Fail to disinfect drinking water originating from surface water	$300	$45	$345

Provision	Contravention	Fine	Victim Surcharge Levy	Ticketed Amount
section 5 (2) (b)	Fail to disinfect drinking water originating from ground water at risk of containing pathogens	$300	$45	$345
section 8 (2)	Fail to monitor for total coliform bacteria or *Escheria coli*	$500	$75	$575
Public Health Act				
section 99 (1) (k)	Fail to comply with an order issued under Part 4	$300	$45	$345
section 99 (4) (a)	Provide false or misleading information	$100	$15	$115
section 99 (4) (b)	Interfere with or obstruct an official	$100	$15	$115
Public Health Act **– Health Hazards Regulation, B.C. Reg. 216/2011**				
section 7	Fail to provide sufficient potable drinking water	$100	$15	$115
Public Health Act **– Public Health Act Transitional Regulation, B.C. Reg. 51/2009**				
section 15	Fail to notify of a discharge	$200	$30	$230

Nothing in the *Drinking Water Protection Act* affects the application of the *Public Health Act*, and there may be some circumstances in which facts that give rise to an offense under the *Drinking Water Protection Act* could also constitute an offense under the *Public Health Act* or its regulations. This includes failure to report spills under section 15 of the Public Health Act Transitional Regulation, and failure to comply with health hazard abatement orders under section 42 of the *Public Health Act* (discussed in section 4.3.6 of this Guide). As such, a ticket under the *Public Health Act* can be issued in appropriate cases, even if the violation of the *Public Health Act* occurs in relation to drinking water matters.

4.4.3 Court order to require compliance

In addition to the ability to prosecute a person for an offense, a health authority can make an application to court to seek an "injunction." This requires the person to stop contravening the

Act, regulations or order, or take action as directed by the court for the purpose of achieving compliance or remedying or preventing a drinking water health hazard (section 42).

The importance of an injunction under this section is that, if a person fails to comply, they are not only in noncompliance with the Act, but they would also be in contempt of court.

An order to require compliance under section 42 of the Act does not necessarily require the same evidentiary standards or legal burdens of proof that may be required when prosecuting a person for an offense under the Act.

Where a drinking water officer believes an application to court under section 42 would be appropriate, they should discuss the matter with the senior manager and legal counsel as appropriate.

4.5 General policy for prioritizing compliance activity based on health risks

Given the large number of water systems that are subject to the Act, and the fact that resources for drinking water officers and their delegates is limited, oversight and compliance activity should be prioritized to ensure that resources are allocated based on a principled and risk-based policy if necessary.

Drinking water officers are encouraged to establish a prioritization policy that meets these basic principles, having regard to the circumstances of the health authority in which they are operating. This policy should categorize systems as being of low, medium or high priority for the purposes of drinking water officer activity. It should be based on the professional judgment of the drinking water officer and should, in general, consider factors that include, but are not limited to:

- Risk that the system is not providing or will not provide potable water
- Likelihood and impact, consequence or severity of the threat posed
- Number of persons using the system (i.e. number of users/ connections)
- Population demographics (i.e. vulnerable population groups like schools and care facilities)

- Past history of compliance, threat identification and voluntary remedial action
- System complexity

A sample of a basic tool for assessing the hazard rating of a water system can be found in Appendix 27.

The prioritization of systems should be regularly reviewed and revised as necessary, particularly at any time that a drinking water officer obtains new information about a system that may affect its priority rating.

Once prioritizations have been assigned, compliance activities should be undertaken in accordance with the policy framework set out below.

4.5.1 Low priority systems

Where water systems are considered to be low risk in terms of possible threats to human health, these systems should be considered low priority. While drinking water officers should take steps to ensure compliance with these systems to the extent possible, it is important to consider how these systems should be prioritized relative to others. More specifically, where drinking water officers cannot be reasonably expected to take routine monitoring and compliance action in relation to such systems without compromising regulatory efforts in respect of medium and high-risk systems (discussed below), these low priority files should be noted as such. Files should be maintained and information should be added to the file as it becomes available. If any information comes to the attention of the drinking water officer to suggest that such a file is no longer appropriately considered low priority, that information must be considered and the file managed accordingly.

Although low priority files may not be the principal focus of drinking water officer's activity where resource limitations present challenges, the obligation of water suppliers to comply fully with the Act remains. It is therefore important that drinking water officers not do or say anything to the operators of such systems to indicate that less than full compliance with the Act is

acceptable.[61] Rather, if the drinking water officer believes that it is appropriate to provide some relief or relaxation from the standards of the Act and Regulation in relation to such low risk systems, the drinking water officer should do so by exercising the authority available under the Act. For example, this could include amending the terms and conditions of an operating permit regarding the date on which the operator qualification provisions become applicable, or modifying frequency of sampling required.

4.5.2 Medium priority systems

Where water systems are considered to propose moderate risk to public health, these should be considered medium priority. They should be subject to regular and systematic review and inspection, to the extent time and resources permit. Drinking water officers should draw to the attention of the water supplier any concerns that exist regarding potential threats to public health and compliance with the Act, and should indicate the actions that might be taken if the concerns are not addressed. Drinking water officers should also exercise their discretion in deciding whether to take further actions in respect of systems that are considered medium priority, having regard to available resources and other higher priority risks. If a system that has been considered to be medium priority is subject to a change in circumstances such that the drinking water officer believes there is a significant threat or potential threat to public health, the system should be considered a high priority system, and dealt with as discussed below.

4.5.3 High priority systems

In any case where a drinking water officer is aware of a system that poses a high risk to public health, that system should be considered to be high priority. Drinking water officers should consider the full range of remedial actions that may be required or taken in relation to such a system, and should take steps to ensure that the appropriate action is taken. If a drinking water

[61] This is important because it could lessen a water supplier's commitment to compliance with the Act and Regulation, and also because it could have potentially negative implications for enforcement action if that is necessary at some point, as the water supplier might potentially argue the defense of "officially induced error".

officer is not able, due to time or resource constraints, to attend to high priority systems within a time frame that the drinking water officer considers reasonable having regard to the risk presented, the drinking water officer should advise the senior manager and the medical health officer immediately.

Drinking water officers should maintain a system of tracking the prioritization of files, and should provide regular updates to the senior manager regarding overall caseload and risk prioritization. This will ensure that the health authority executive is fully informed of the status of files, and can make appropriate resource allocation decisions within the overall public health protection functions of the health authority.

Health authority officials should consider consulting the Ministry of Health and other Health Authorities in the development of risk assessment tools and supporting data systems. This is a matter that can be discussed through the Drinking Water Leadership Council forum.

Chapter 5: Other Considerations

5.1 Reconsideration and review of decisions

Under the Act, there is no way for persons who are dissatisfied with a decision of the drinking water officer or issuing official to appeal that decision.

The Act does, however, provide for limited rights of reconsideration and review, in section 39.1. Specifically, a person who is affected by a decision[62] can request a review or reconsideration only in relation to the following types of decisions of a drinking water officer:

(a) section 19 *[drinking water officer authority in relation to assessments]*;

(b) section 25 *[hazard abatement and prevention orders]*;

(c) section 26 *[orders respecting contraventions]*;

(d) section 31 (4) *[request respecting plan initiation]*;

(e) a decision resulting from a reconsideration under subsection (3) of this section.

If a drinking water officer is asked to make one of these orders but elects not to, this should be considered a "decision" for the purposes of determining a person's right to request a review or reconsideration.

Reconsideration and review are two different matters. It is important that the difference be clearly communicated to persons who may inquire about such options.

[62] The Act does not specify who is "affected by a decision". If a drinking water officer has a question as to whether a person requesting a review or reconsideration meets this test, they should discuss the matter with legal counsel.

5.1.1 Reconsideration

A request for reconsideration can be made at any time after a decision is made. Where a request for reconsideration is made, the person must indicate new evidence that they believe would justify the drinking water officer changing, reversing or varying a prior decision.

"New evidence" means evidence that was not provided to or considered by the drinking water officer when the original decision was made. Although there is no specific requirement that a person use a designated form when requesting reconsideration, people should be encouraged to use the standard form set out in appendix 28. If, however, a person simply writes a letter that provides the basic information necessary to consider a request for reconsideration, then that request should be considered and the person should not be required to complete the standard form.

In deciding whether to confirm, vary or reverse the initial decision, the drinking water officer should assess whether there is new evidence which, if it had been available when the decision was made, would have caused him or her to make a different decision.

Reconsideration of decisions should be made by the drinking water officer that made the original decision, unless the drinking water officer is not available to make the reconsideration decision within a reasonable period of time (for example, if the drinking water officer is on extended leave). In that case, another drinking water officer may consider the request for reconsideration.

Decisions resulting from a request for reconsideration should be provided in writing.

5.1.2 Reviews

A review differs from reconsideration in two significant ways. First, a review is conducted by a person other than the drinking water officer that made the original decision. Second, a review is not based on consideration of whether new evidence justifies varying or reversing the initial decision. To the contrary, new evidence cannot be provided or considered in a review.

5.1.2.1 How are requests processed?

Although there is no specific requirement that a person use a designated form when requesting a review, people should be encouraged to use the standard form request set out in appendix 29. If, however, a person simply writes a letter that provides the basic information necessary to consider a request for review, then that request should be considered and the person should not be required to complete the standard form.

The person requesting the review should send it directly to the provincial health officer. The provincial health officer may undertake the review himself, or he may, pursuant to section 39.1(4)(a), direct that it be undertaken by a medical health officer.

5.1.2.2 Which information can be considered?

Reviews can only be conducted "on the record". This means the person conducting the review can only consider information in the file that was available to the original decision maker when the decision was made. A person is not able to introduce new evidence on a review. If the person believes there is new evidence relevant to the matter, they must request reconsideration from the original decision-maker instead (see 5.1.1 of this chapter of the Guide). The person can also request a review after reconsideration, if the person is still dissatisfied with the decision.

5.1.2.3 When should other parties be notified?

If a person conducting a review believes that the decision in question could have a material impact on persons other than the party requesting the review, then they should direct the applicant to give notice of the review to those other persons, pursuant to section 39.1(4)(c). This would generally be appropriate in cases where third parties were consulted when the original decision was made, although it would not necessarily be limited to those circumstances.

The reviewing official should specify the type of notice that must be given, and the time by which it must be provided. A sample form of notice to third parties is set out in appendix 30.

5.1.2.4 Determining the result of a review

Upon completing a review, the decision can be confirmed, varied or reversed, or the matter can be referred back to the drinking water officer, (with or without directions) (section 39.1(4)(d)). This is a decision for the reviewing official to make.

Generally, if the reviewing official is in a position to confirm, vary or reverse the decision based on the information on the record, he or she should do so. If, however, the reviewing official believes it is more appropriate to refer the matter back to the drinking water officer for further consideration, he or she may do so. Circumstances in which it may be more appropriate to refer the matter back to the drinking water officer may include, but are not limited to:

- Situations in which the reviewing official believes the drinking water officer should have obtained further information before making a decision
- Situations in which the reviewing official believes the decision should be varied, but the decision as to precisely how the decision should be varied is one best left for the drinking water officer with knowledge of the water supply system

Where the reviewing official has decided it is appropriate to refer a matter back to the drinking water officer, the reviewing official should attempt to provide directions and comments that would help the drinking water officer address any of the factors that, in the opinion of the reviewing officer, resulted in the matter being referred back.

5.2 Application of Act to First Nations' and federal lands

The federal government holds jurisdiction over federal land and First Nations' lands with respect to drinking water. Provincial laws may be applied differently on First Nations' lands in relation to other federal lands.

5.2.1 First Nations' Lands

Health authority staff should consult with their legal counsel in determining whether or to what extent the Act may apply to any particular case involving First Nations' lands.

5.2.2 Federal land

Health authority staff should consult with their legal counsel in determining whether or to what extent the Act may apply to any particular case involving other federal land.

5.3 Other relevant acts

Because drinking water protection is affected by so many factors from source to tap, there are a variety of other pieces of legislation that have relevance to drinking water protection. To some extent, regulation under these other acts has the potential to overlap with regulation under the *Drinking Water Protection Act*.

Section 2 (1) of the *Drinking Water Protection Act* recognizes this principle, and it states that the authority provided under this Act is in addition to and does not restrict authority provided by or under any other enactment that may be used to protect drinking water.

Beyond this, the Act does not contain any general rules about how it relates to other legislation. There are, however, a number of sections that contain specific rules relating to other legislation. For example, section 25(10) provides that, in the event of a conflict between an order under section 25 and an order of a health officer under the *Public Health Act*, the order of the health officer prevails.

Similarly, section 23(3) of the Act provides that the prohibitions against contaminating drinking water or tampering with the system in section 23 do not apply if the introduction or activity is authorized or required by or under another enactment. This provision serves only to prevent prosecution for an offence under section 23 of the Act. Other sections of the Act remain applicable and there is no general rule that, if a person is in compliance with another law, they are allowed to violate the *Drinking Water Protection Act*.

For these reasons, it is important to carefully consider the details of each relevant section of the *Drinking Water Protection Act*, and to consider how it may relate to other legislation on the facts

of a particular case. If a drinking water officer has any questions in this regard, he or she should consult with legal counsel.

While there are a wide range of acts that may be of interest to drinking water protection other than the *Drinking Water Protection Act*, a number of the most significant ones are discussed below. This does not represent an exhaustive list of relevant acts, or an exhaustive examination of relevant provisions within the acts noted (or regulations made under the act). In any case that an official has questions regarding the applicability or effect of other legislation as it relates to the *Drinking Water Protection Act*, the official should consult legal counsel, in accordance with the process established by the health authority.

5.3.1 Public Health Act

Any of the powers that may be used to address public health issues generally under the *Public Health Act* continue to apply to drinking water issues. They are complemented – and not displaced – by the *Drinking Water Protection Act*. These *Public Health Act* powers include, but are not limited to powers under Part 4 respecting "health hazards", and regulations developed under the *Health Act.*

5.3.2 Water Act

5.3.2.1 General

This act sets out a system for the licensing of surface water in BC. It also establishes a Comptroller of Water Rights and regional managers, whose role is to make licensing and other decisions regarding the regulation of water use and water works[63] under this act.

[63] The term "works" is defined to mean:
(a) anything capable of or used for
(i) diverting, storing, measuring, conserving, conveying, retarding, confining or using water,
(ii) producing, measuring, transmitting or using electricity, or
(iii) collecting, conveying or disposing of sewage or garbage or
(iv) preventing or extinguishing fires,

The *Drinking Water Protection Act* operates independently of the *Water Act*, and a person who holds a license under the *Water Act* is, like any other person, required to comply with the applicable provisions of *Drinking Water Protection Act* if they are an owner of a "water supply system" as that term is defined in the *Drinking Water Protection Act*.[64]

Similarly, the mere fact that something is authorized under the *Drinking Water Protection Act* does not serve to authorize it under the *Water Act*. In other words, if a person has a permit under the *Drinking Water Protection Act* to construct or operate a water supply system, they will still require a separate license under the *Water Act* to draw water from a surface water source. Water licenses may also specify certain water works that are approved in relation to the license, and, if changes are made to the system in relation to *Drinking Water Protection Act* issues, the person may require an amendment to their *Water Act* license.

For more information concerning the regulation of surface water under the *Water Act*, see http://www.env.gov.bc.ca/wsd/water_rights/licence_application/index.html

5.3.2.2 Ground Water Protection Regulation

The *Ground Water Protection Regulation*, deal with matters such as:

- well drilling
- well operation
- well capping
- surface seals
- well head protection
- prohibition on allowing introduction of foreign matter
- well deactivation and closing

(b) booms and piles placed in a stream,
(c) obstructions placed in or removed from streams or the banks or beds of streams, and
(d) changes in and about a stream,
(e) access roads to any of the works referred to in paragraphs (a) to (d).
(*Water Act*, section 1)

[64] As discussed in Chapter 2, section 2.1 (under Domestic Water System) of this Guide, this would not include equipment, works and facilities constructed, operated or maintained under (i) a license, as defined in the *Water Act*, for conservation, power or storage purposes, or (ii) a permit issued under the *Water Act*, because these are excluded from the definition of "domestic water system", which is used in the definition of "water supply system". See *Act,* section 1 and Regulation, section 3)

Some of these rules are directly relevant to the construction, maintenance, operation, assessment and protection of wells that serve water supply systems.

The ground water protection provisions of the *Water Act* and the *Ground Water Protection Regulation* are administered by officials from the Ministry of Environment.

Drinking water officers hold some powers under the *Water Act*. Specifically, drinking water officers have the ability to request and receive certain types of information respecting well driller and pump installer qualifications, well reports and well water analyses. These provisions are found in sections 71-73 of the *Water Act*.

The provisions of the *Water Act* also contain provisions allowing for the establishment of water management plans. These plans are in some ways similar to drinking water protection plans that can be developed under Part 5 of the *Drinking Water Protection Act*. Given the potential for overlap, the acts provide that if plans are developed under both acts in respect of a particular area, they can be developed jointly. Further, the acts allow the Lieutenant Governor in Council (Cabinet) to pass regulations which would apply the licensing provisions of the *Water Act* to ground water in specified areas.

5.3.3 Water Utility Act

This act provides that a "water utility" is subject to the control and regulation of the Comptroller of Water Rights under the *Water Act.* The term "water utility" is defined as:

> (a) a person who owns or operates in British Columbia equipment or facilities for the diverting, developing, pumping, impounding, distributing or furnishing of water, for compensation,
>
> (i) to or for more than the prescribed number of persons or, if no number is prescribed, 5 or more persons, or
>
> (ii) to a corporation, and
>
> (b) the lessee, trustee, receiver or liquidator of a person referred to in paragraph (a),

but does not include

(c) a municipality in respect of services furnished by the municipality,

(d) a person who furnishes services or commodity only to himself or herself, the person's employees or tenants, if the service or commodity is not resold to or used by others,

(e) the Greater Vancouver Water District under the *Greater Vancouver Water District Act*,

(f) an improvement district or water users' community under the *Water Act*,

(g) a regional district under the *Local Government Act* in respect of the service of the supply of water

(i) in bulk to a municipality or electoral area participating in that service, or

(ii) to consumers in a municipality participating in that service,

(h) a person who supplies water by tanker truck,

(i) a person who sells bottled water, or

(j) a strata corporation, if the comptroller is satisfied that the owner developers within the meaning of the *Strata Property Act* have ceased to own a majority of the strata lots in the strata plan[65]

Water utilities can only be established if the Comptroller of Water Rights issues a Certificate of Public Convenience and Necessity under the *Water Utility Act*. Drinking waters officers do not have authority under that act, but officials responsible for regulation of water utilities may consult with drinking water officers in the exercise of their regulatory responsibilities.

For more information concerning the regulation of water utilities, see http://www.env.gov.bc.ca/wsd/water_rights/water_utilities/index.html.

[65] See section 5.5.1 and Part B of this Guide for more information.

5.3.4 Water Protection Act

This act places restrictions on the removal of bulk water from British Columbia, and imposes restrictions on the large scale transfer of water between watersheds.

5.3.5 Local Services Act (Subdivision Regulations)

Under section 2 of the *Local Services Act*, the Lieutenant Governor in Council may establish areas of British Columbia not incorporated as a city, town, village or district municipality as a local area to which this act applies.

Under this act, the *Subdivision Regulations* has been established. Sections 1.01and 1.03 set out its scope of application. These sections state:

1.01 These regulations apply to the subdivision of all land in the Province except land

(a) within a municipality,

(b) regulated by a bylaw under section 938 of the *Municipal Act*, and

(c) within B.C. Regulation 274/69, the Community Planning Area Number 24 (Gulf Islands) Regulations.

And

1.03 Notwithstanding section 1.01 (b), where a bylaw does not regulate a matter covered by these regulations, these regulations apply to that matter.

The Subdivision Regulations provides that the ability to subdivide is limited by consideration of water supply issues. Specifically, section 4.01 states:

4.01 No subdivision shall be approved

…

(d) if it does not comply with these regulations

And section 4.09 states:

4.09 (1) The design of any community water system[66] to serve the subdivision shall be in accordance with the requirements of any authority having jurisdiction over the system pursuant to

(a) the *Health Act*[67] and the *Water Utility Act*,

(b) the *Health Act* and the *Water Act*, when an improvement district has an applicable subdivision bylaw pursuant to the *Water Act*, or

(c) the *Health Act* and the *Municipal Act*, when a regional district has an applicable bylaw setting out the terms and conditions of any extension to its community water system,

as the case may be.

(2) The community water system approved pursuant to section 4.09 (1) shall be installed as approved before the subdivision is approved.

(3) Notwithstanding the requirements of section 4.09 (2), a subdivision may be approved prior to the construction of the community water system, provided that an arrangement securing performance of such construction satisfactory to the approving officer has been made with

(a) the Comptroller of Water Rights (under the *Water Utility Act*),

(b) an improvement district having an applicable subdivision bylaw adopted pursuant to the *Water Act*, or

(c) a regional district having an applicable bylaw setting out the terms and conditions of any extension to its community water system,

as the case may be, but in no case shall the subdivision be approved before the plans for the community water system have been approved.

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[66] A system of waterworks which serves 2 or more parcels and which is owned, operated and maintained by an improvement district under the *Water Act* or the *Municipal Act*, or a regional district, or which is regulated under the *Water Utility Act*

[67] The Subdivision Regulations makes reference to the *Health Act*. This is an old piece of legislation that was replaced by the *Public Health Act*. The *Interpretation Act* allows the *Public Health Act* to be considered in lieu of the *Health Act*.

5.3.6 Environmental Management Act

The *Environmental Management Act* is the primary statute for regulation of waste discharge and pollution prevention in British Columbia. The *Environmental Management Act* does not provide any specific powers to drinking water officers, but it is a statute that drinking water officers should be familiar with, as there will be ongoing relationships between drinking water officers and officials implementing the *Environmental Management Act*. The *Environmental Management Act* will allow for the establishment of area based plans, which are similar to drinking water protection plans under part 5 of the *Drinking Water Protection Act*, and water management plans under the *Water Act*. This legislation allows for plans under it to be coordinated with plans under the *Drinking Water Protection Act* and the *Water Act*, as appropriate.

There are a significant number of regulations under this act that may also have relevance to drinking water protection, including regulations respecting contaminated sites, animal waste control and organic matter recycling.

For more information concerning this act and its regulations, see http://www.env.gov.bc.ca/epd/main/ema.htm.

5.3.7 Forest and Range Practices Act

This act sets out a number of stewardship planning and other protection measures respecting forestry and range practices. This includes the ability of the Lieutenant Governor in Council to make regulations:

- Allowing the minister responsible for the *Land Act* to designate an area of land in a watershed as a community watershed and the minister responsible for the *Water Act* (currently administered by the Ministry of Environment) to establish water quality objectives in relation to a community watershed (section 150)
- Allowing the minister responsible for the *Wildlife Act* to designate areas and set objectives generally in watersheds with significant downstream fisheries values and significant watershed sensitivity (section 150.1)

- Allowing the Minister [responsible for the Forest and Range Practices Act] to designate areas as lakeshore management zones, and to set objectives in relation to those zones (section 150.2)
- To classify streams, wetlands and lakes, and make regulations respecting riparian zones (section 150.5)

Drinking water officers should contact a local representative of the Ministry of Forest, Lands and Natural Resource Operations (MFLNRO) to find out information concerning regulations made pertaining to these sections of the *Forest and Range Practices Act* as well as implications related to regulating drinking water supply systems.

Responsibilities related to forest and range practices are also set out under this act. Sections 59 and 60 of the Forest Planning and Practices Regulation, which is established under the *Forest and Range Practices Act*, states:

Protecting water quality

59 Unless exempted under section 91 (1) [minister may grant exemptions], an authorized person who carries out a primary forest activity must ensure that the primary forest activity does not cause material that is harmful to human health to be deposited in, or transported to, water that is diverted for human consumption by a licensed waterworks.

Licensed waterworks

60 (1) Unless exempted under section 91 (1) [minister may grant exemptions], an authorized person who carries out a primary forest activity must ensure that the primary forest activity does not damage a licensed waterworks.

(2) An agreement holder must not harvest timber or construct a road within a community watershed if the timber harvesting or road construction is within a 100 m radius upslope of a licensed waterworks where the water is diverted for human consumption, unless the timber harvesting or road construction will not increase sediment delivery to the intake.

The term "licensed waterworks" is defined in section 1 of this regulation to mean:

a water supply intake or a water storage and delivery infrastructure that is licensed under the *Water Act* or authorized under an operating permit issued under the *Drinking Water Protection Act*;

Other relevant provisions may be found in the Government Actions Regulation, the Range Planning and Practices Regulation, and the Woodlot License Planning and Practices, all established under this act.

Drinking water officers may wish to consult with local MFLNRO officials in cases where the drinking water officer believes this act may have relevance to drinking water issues.

5.4 Relationship between DWO activities and officials from other agencies

In some cases, there may be considerable overlap between the legislative responsibilities of drinking water officers and those of officials from other agencies. In many cases it will be appropriate for these agencies to collaborate. In some circumstances, it may be appropriate for drinking water officers to rely on steps being taken by other agencies if and to the extent those may address concerns held by drinking water officers in relation to the decisions of the other officials (and vice versa).

At the same time, it is essential to ensure that regulatory responsibility is not unduly disregarded because there may be another agency with potentially relevant authority under other legislation. This is especially important when various relevant acts disclose slightly different requirements and procedures that may make reliance on another agency inappropriate from the public health perspective even though it appears that there are two agencies that are equally able to take appropriate action.

The following principles should be applied by drinking water officers with a view to achieving appropriate cooperation with other agencies, while at the same time ensuring appropriate regard for the role and function of drinking water officers under the *Drinking Water Protection Act*.

- Drinking water officers may decide to defer taking action under the *Drinking Water Protection Act* while a matter is being reviewed or action taken under another act, if

(a) The drinking water officer believes that the action being taken under another act has the potential to address all outstanding issues that exist in respect of drinking water protection
(b) The drinking water officer remains apprised of the situation and actions being taken by the other agency(ies) and resumes direct involvement if at any time the drinking water officer considers that necessary protect public health.

- Statutory officials must not use powers under one statutory mandate solely and specifically for the purposes of assisting an official with a different statutory mandate. However, information that is obtained by an official for the purposes of the act he or she is administering, can, subject to the next point, be shared with other relevant agencies.
- Statutory officials must ensure that any sharing of personal information is permissible under the *Freedom of Information and Protection of Privacy Act*, or other relevant legislation.

Provided these basic principles are respected, strong communication and cooperation with other relevant agencies can provide considerable practical benefit to all the regulators involved, and may also be of benefit to the water supplier (or other concerned persons).

5.5 Additional Considerations under the Act

5.5.1 Systems within systems

There are many situations in which a water supply system operating under a valid permit may re-distribute water to a number of connections through a separate water supply system while maintaining public health protection goals without further treatment or complex infrastructure. This is a "system within a system" that involves nothing more than the installation pipes for distribution. The application of the *Drinking Water Protection Act* to this situation separately would be unnecessarily onerous as it would result in the unwarranted use of health authority resources for reviewing and monitoring, and would create unnecessary costs and requirements to the users of these systems, for little, if any, public health benefit.

Common examples of such systems would include:

- Those created by strata properties
- Townhouses

- Mobile home parks
- Small resorts

Section 3 (d) of the Drinking Water Protection Regulation authorizes the drinking water officer, or issuing official, to exempt these systems from the definition of a "domestic water system" in the Act, and the associated requirements for construction permits, operating permits, water sampling and operator training.

The intended outcomes are to:

- Empower the drinking water officer or issuing official with the flexibility to make risk-based decisions on whether a system within system should be exempted from requirements of the *Act*.

- Reduce the need for unnecessary resources (permits, applications, reviews etc) being put towards creating small systems where water is simply being redistributed from a permitted water supply system.
- Ensure that where water re-distribution requires further treatment, additional infrastructure, or on-going maintenance to prevent a drinking water health hazard, the *Act* will apply.

5.6 Considerations and advice for those with compromised immune systems

Those with compromised immune systems, such as some people with HIV, or undergoing certain types of cancer treatment, may be at higher risk of water-borne infections.

BC's Health Link File #56 provides messaging on drinking water and those with weakened immune systems, and is updated form time to time (BC HealthLink website at http://www.healthlinkbc.ca/healthfiles/hfile56.stm). These guidelines provide advice on precautions that those at risk should be taking with drinking water to avoid risk of water borne diseases associated with bacteria, virus or parasites.

The information from HealthLink File #56 should be incorporated into policy and operations manuals as necessary, and/or distributed when the public seeks information on this subject.

5.7 Finding and regulating systems

There are likely many (possibly thousands) systems that meet the definition of a water supply system under the *Drinking Water Protection Act*. In some cases, operators either do not know they are subject to the *Drinking Water Protection Act*, or intentionally operate outside of the Act and regulations. Many of these systems come to the attention of the health authority over time. Water supply system operators have a legal obligation to comply with the Act and report to the health authority. In some cases, health authorities have the resources to systematically look for "underground" systems that have not been identified. There are currently tools, such as databases held by the Ministry of Environment that health authorities can use to locate water supply systems. These information tools and their application to find water supply systems are described in Part B: *Strategies, Tools And Procedures That Health Authorities May Use To Find And Regulate Small Systems* of this guide.

5.8 Complaints and enquiries

All agencies receive concerns from time to time pertaining to stakeholder dissatisfaction. In the case of drinking water programs, these often pertain to:

- Complaints regarding a specific public health concern in a community (e.g. drinking water threat).
- Complaints related to services provided by a health authority, or policies a health authority has adopted.
- Complaints regarding a policy or service of the Ministry of Health.

Part B: *Drinking Water Complaints And Inquiries Process* of this Guide contains advice on processes to address and respond to complaints when they happen, as well as recommendations on how stakeholders may file their concerns, and what they might expect as an outcome once they are filed.