PROVINCE OF BRITISH COLUMBIA

ORDER OF THE MINISTER OF HEALTH

Ministerial Order No. M 081

I, George Abbott, Minister of Health, order that the **"Drinking Water Officers' Guide"** as amended from time to time, and attached as Appendix A, is established as guidelines under s.4 (1) (a) of the *Drinking Water Protection Act.*

George Abbott

Minister of Health

This Order made the 28th day of March, 2007 at Victoria, British Columbia.

(This part is for administrative purposes only and is not part of the Order)

Authority under which Order is made:

Act and section:- *Drinking Water Protection Act* s. 4(1)(a)

Other (specify):-

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DRINKING WATER OFFICERS' GUIDE

Prepared by the Drinking Water Leadership Council

Last Updated: January 16, 2007

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PART ONE - INTRODUCTION

Purpose of this document

This document has been developed to promote effective, consistent and transparent administration of the *Drinking Water Protection Act* (the "Act") and *Drinking Water Protection Regulation* (the "Regulation") across British Columbia.[1] It is intended to provide policy and procedural guidance to public health officials who are responsible for the implementation of this Act, recognizing the broad scope of regulatory authority conferred, and the demands placed on the human and financial resources of the regional health authorities in respect of this Act and other public health statutes.

In many respects, this document reflects policies and practices that have been applied by public health officials for years, based on prior legislation and professional expertise. This document seeks to assemble that knowledge and experience for the benefit of all public health officials and members of the general public, and to refine policy and practice to reflect the new legislative regime established under the Act. This regime is based upon a multi-barrier approach, which seeks to address threats to drinking water at various stages, including its source, treatment systems, distribution, and at the tap.[2] It is part of an overall strategy set out in the province's Action Plan for Safe Drinking Water in British Columbia (See http://www.healthservices.gov.bc.ca/cpa/publications/safe_drinking_printcopy.pdf.) and reflects a comprehensive approach to drinking water protection based on sound risk assessment.

[1] A copy of the Act and Regulation are set out in appendix 1 and appendix 2, respectively.

[2] For a discussion of the multi-barrier approach to drinking water protection, see "From Source to Tap: The multi-barrier approach to safe drinking water", May 16, 2002, Prepared by the Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Environmental and Occupational Health and the Water Quality Task Group of the Canadian Council of Ministers of the Environment (http://www.hc-sc.gc.ca/hecs-sesc/water/pdf/source-to-tap.pdf)

1. Application to health authorities

This Guide has been approved by the Deputy Minister of Health, on behalf of the Minister of Health, as a "guideline" under section 4 of the Act. Section 4 states:

> (1) The minister may establish
>
> (a) guidelines that must be considered, and
>
> (b) directives that must be followed
>
> by drinking water officers and other officials in exercising powers and performing duties or functions under this Act and the *Health Act* in relation to drinking water.
>
> (2) The Provincial health officer must monitor compliance of drinking water officers with guidelines and directives established under this section.

Drinking water officials must consider this Guide in the exercise of their duties and discretion. They are however able to depart from the Guide in any case where sound reason exists to do so (as discussed further below).

The appendices referred to in this document contain a number of sample forms, letters and similar documents that are not "guidelines" approved by the minister. These are included for convenience and reference only. Drinking water officials may use such sample materials contained in the appendices if and as they see fit, or they may use other materials, provided those are developed having due regard to the portions of the Guide to which the appendices relate.

2. Relationship to the Act and Regulation

It is important to note that, even though approved as a guideline under section 4 of the act, this Guide does not have the force of law. As such, if there is ever a conflict between this Guide and the Act, the Regulation or the principles of administrative fairness, this Guide is superceded by the latter authorities to the extent of any such conflict.

Further, this document is intended only as a policy guide to inform the exercise of statutory discretion. Decision-makers are expected to consider this document and to apply it as a general

rule, but if application of this Guide is not considered appropriate to particular facts or circumstances, the provisions of this Guide should not be applied. The only exception relates to "directives" which may be issued by the minister, as "directives" must be followed. At present, there are no directives.

3. Process for amendment

Any questions or suggestions concerning this Guide, or proposed amendments, should be provided to:

Attention: Karen Rothe
Health Protection, Ministry of Health
4th Floor, 1515 Blanshard Street
Victoria, BC V8W 3C8

Proposed amendments will be considered by the Drinking Water Leadership Council (discussed below) on a regular basis, and this Guide may be amended from time to time, subject to approval by the minister.

The latest version of this document will be kept by the Secretariat of the Drinking Water Leadership Council and posted on the Ministry of Health web site.

4. 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.

4.1Health Authorities

The five regional health authorities established under the *Health Authorities Act* are responsible for 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.[3] 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.

4.2 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.

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

It is expected that the powers of drinking water officers will be delegated to officials that may be 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.

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[3] 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.

[4] 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.

A sample form of delegation is set out in appendix 3.

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

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. I.e. 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. [5]

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

Having said the above, 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 should note 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

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 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 (for example, 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 of the health authority. In addition, there are a number of specific circumstances for which this Guide recommends such consultation. Because the organizational structure of health authorities differs across regions, references in this manual will be to consultation with a "senior manager". This role may be played by different persons in different authorities. Again, however, it must be noted that 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.

Relationship to officials from other agencies or authorities

At times, it may be appropriate for 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

[5] 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. I.e. delegation can only be undertaken by a person who is actually appointed as a drinking water officer under section 3 of the Act.

respecting such consultations are discussed in various sections of this Guide as it relates to specific issues.

In addition, drinking water officers also 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.

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

4.4 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, discussed above.

In addition, 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 is not limited to, public health programs such as drinking water protection.

4.5 Provincial health officer

Advisory and reporting functions

Section of 3 the *Health Act* provides:

> (1) The Provincial health officer is the senior medical health officer for British Columbia and must advise the minister, and senior members of the ministry, in an independent manner on health issues in British Columbia and on the need for legislation, policies and practices respecting those issues.
>
> (2) The Provincial health officer must monitor the health of the people of British Columbia and provide to the people of British Columbia information and analyses on health issues.
>
> (3) If the Provincial health officer considers that the interests of the people of British Columbia are best served by making a report to the public on health issues in British Columbia, or on the need for legislation or a change of policy or practice respecting health in British Columbia, the Provincial health officer must make that report in the manner the Provincial health officer considers most appropriate.

> (4) Each year the Provincial health officer must give the minister a report on the health of the people of British Columbia including, if appropriate, information about the health of the people as measured against population health targets, and the minister must lay the report before the Legislative Assembly as soon as practical

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

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, section 4 of the *Health Act* states:

> (1) Despite other provisions of this act or the regulations, if the Provincial health officer considers that the health of the public is or may be in danger, the Provincial health officer may order a medical health officer to take the action the Provincial health officer considers appropriate.
>
> (2) The Provincial health officer must establish and monitor professional standards for medical health officers.
>
> (3) In those areas of British Columbia outside the jurisdiction of a local board, the Provincial health officer has the power and authority of a medical health officer appointed under this Act.
>
> (4) If section 30 applies and a medical health officer has not been appointed to act as a temporary replacement, the Provincial health officer may act in the place of a medical health officer while section 30 continues to apply or until a temporary replacement is appointed under section 30.

The provincial health officer does not have authority to direct the actions of drinking water officers under the *Drinking Water Protection Act* (except to the limited extent discussed below). However, because the provisions of the powers of the *Drinking Water Protection Act* apply in addition to those of other acts, the provincial health officer retains the ability to direct medical health officers to take actions under the *Health Act* if the provincial health officer considers that necessary. This is true even if the threat to public health relates to drinking water.

Specific functions under the Act

In addition to the general roles discussed above in respect of the *Health 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.

4.6 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 also includes representation by the Ministry of Environment, which has authority for various regulatory regimes affecting drinking water

including waste management, pollution prevention, and pesticide control, ground water protection and well drilling standards.[6]

As noted earlier, the Drinking Water Leadership Council is the body that has prepared this Guide.

4.7 Advisory Committees

Under section 5 of the Act, the minister can establish technical advisory committees to consider matters referred to it by the minister. To date, no such committee has been formally established. The ministry does, however, draw upon the technical knowledge and expertise of various officials and organizations through informal committee consultations.

4.8 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 at http://www.healthservices.gov.bc.ca/protect/approvedlabs.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 Environmental Analytical Laboratories in respect of specific testing. See www.caeal.ca

4.9 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).

[6] Water licensing under the *Water Act* is administered by the Ministry of Environment.

The EOCP is a society, established under the *Society Act*. It does not have any regulatory powers and cannot impose legally binding requirements on any party. However, certification by the EOCP is required to meet the requirements of section 12 of the Regulation (as applicable).

The EOCP provides accreditation of training programs to assist in obtaining certification under the EOCP. Those programs may be delivered by other organizations such as the BCWWA (discussed below), colleges and on-line agencies.

For more information on the EOCP, see its web site at http://www.eocp.org/.

4.10 British Columbia Water and Waste Association (BCWWA)

The BCWWA describes itself as "a non-profit association dedicated to the safeguarding of public health and the environment through the sharing of skills, knowledge and experience in the water and wastewater industries". It provides a variety of services, including the development and sharing of best practices documents and training.

Neither the BCWWA nor its best practices documents have any regulatory authority. Drinking water officers and other officials acting under the Act may however refer to such documents as technical resources. They may also require compliance with them as terms and conditions of permits, as they consider appropriate.

For more information on the BCWWA, see its web site at http://www.bcwwa.org/.

PART TWO – SCOPE OF THE ACT

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.[7] 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.

Having said this, it may also be noted that 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

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

↓

OWNER

Includes:

(a) a person who is

[7] 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.

(i) responsible for the ongoing operation of the water supply system or
(ii) in charge of managing that operation and

(b) 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…

(See Act, section 1. Note that the term owner is defined to "include" these persons but is not necessarily limited to them. Part Four, section 3.13.1 of this Guide provides additional information and guidance for cases where it is not readily apparent who the owner of a system is.)

↓

WATER SUPPLY SYSTEM

Means:

A domestic water system, other than:

- systems that serve only a single-family residence[8]

[8] 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:

> If a licence is issued for a community care facility that
>
> (a) is being, or is to be, used
> (I) as a day care for no more than 8 persons, or
> (ii) as a residence for no more than 10 persons, not more than 6 of whom are persons in care, who, in the event of a fire, can safely exit unaided or be removed from the facility by its staff, and
>
> (b) complies with all enactments of British Columbia and of the municipality where the community care facility is located, relating to fire and health respecting a single family dwelling house
>
> then a provision in an enactment of British Columbia, other than this Act, or of a municipality, does not apply to the community care facility if that provision would
>
> (c) limit the number of persons in care that may be accepted or accommodated at that facility or limit the types of care that may be provided to the persons in care at that facility, or
>
> (d) 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.

- equipment, works and facilities constructed, operated or maintained :
  - under a license, as defined in the Water Act, for conservation, power or storage purposes,
  - under a permit issued under the Water Act[9]
  - for bottled water production or distribution[10]
  - for drinking water dispensing machines[11]
- a reservoir relating to a license or permit referred to above
- a building system[12]

(See Act, section 1 and Regulation, section 3)

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DOMESTIC WATER SYSTEM

Means:

A system by which water is provided or offered[13] 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 the Regulation has been included[14]
(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

but excluding

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

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(It should be noted that, 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, including potentially, in appropriate circumstances, section 37 of the *Sanitary Regulations* under the *Health Act.*

[9] Permits are issued under the *Water Act* to construct, maintain or operate works on Crown land. It is important to note that 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".

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

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

[12] This term 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".

[13] In deciding whether water is "provided or offered" it is necessary to consider all the circumstances of a particular case. A person who in fact 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.

[14] None at present.

(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*,
(iii) for bottled water production or distribution, or
(iv) for drinking water dispensing machines;
(b) a reservoir relating to a license or permit referred to in paragraph (a);
(c) a building system[15]

↓

DOMESTIC PURPOSES

Means 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[16]

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 licences 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.

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.

[15] 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."
[16] Systems that supply water solely for use of toilets would generally fall within the definition of a "domestic water system" and be subject to whatever requirements applied under the Act to the system. This would not however include a requirement to provide potable water so long as the system is not connected to a water supply system that provides water for human consumption of food preparation purposes (see Regulation section 3.1(a)).

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. For this reason, legal counsel should be consulted in cases where staff are unclear who should be considered "owners" of a water supply system.

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 Part Four, section 3 below, 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. 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.

It should be noted that, 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

[17] It should be noted that, according to subsection 3, these prohibitions do not apply to activities that are authorized or required by or under any enactment or the person is otherwise acting with lawful authority. This means that a case a person could not be charged for the offense of contaminating water in such circumstances. 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.

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

Generally speaking, 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) 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 *Health Act*, there is no discretion to exempt people from this requirement. (See Act, section 1 and 6, Regulation, section 5)

Exception: "small systems" are not required to meet the potability requirements if the system does not provide water for human consumption or food preparation[20] and is not connected to a system that does, or if each recipient of water from the system has a Point-of-Entry or Point-of-Use treatment system[21] that makes the water potable. (See Act section 1 and 6 and Regulation section 1 and 3.1)

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[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.

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] 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.

[21] 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

Construction permits	Persons may only construct a water supply system if they obtain a construction permit in advance or, in the case of a small system,(See Act section 7 and Regulation section 6) Exception: for "small systems" the requirement for a construction permit may be waived by an issuing official (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 certification requirements set out in the regulations. (See Act section 9, Regulation section 12) Exception: "small systems" are not required to meet any operator training certification requirements unless their operating permit so specifies.
Emergency response plans	Water suppliers must have written emergency response and contingency plans[22] (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 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 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.)

[22] Samples and guides respecting Emergency Response and Contingency Plans for small systems are set out in appendix 4.

	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)
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, an annual report of monitoring[23], 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.[24] (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) and must address cross connections if required to do in an assessment response plan.
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)).

[23] A sample form of an Annual Report of Monitoring is set out in appendix 5.
[24] Applies only to wells identified through an assessment as being at risk of flooding.

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.

2.1. 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 6. Drinking water officers are encouraged to draw 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.

PART THREE – CONSTRUCTION AND OPERATING PERMITS

1. Construction permits

Section 7 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.

It is important to note the breadth of this requirement and the fact that 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.

Exception for small systems

Under section 6(3)(c) of the Regulation, an issuing official (discussed below) 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 which would require specialized equipment or construction practices to address
- 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 in order 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. (For consideration of the types of conditions that might be imposed in respect of the construction and operation of systems that serve POE / POU devices, see appendix 6).

When processing such requests, the issuing official should consider consulting with the local drinking water officer and obtaining his or her views on the request for a waiver. Information obtained from the drinking water officer should be shared with the applicant for comment before a decision is made about whether to issue a waiver, if the information the drinking water officer provides may adversely affect the person's waiver request.

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 persons waiver request was decided.

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

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, and

(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 should not consider applications for construction permits in respect of systems that they themselves have designed or would install.

1.2. Submission of applications

Applications for construction permits must be made to the issuing official "in a form satisfactory to the drinking water officer" (Regulation section 6 (2)). Appendix 7 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.

It is important to note that drinking water officers 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 a drinking water officer considers appropriate.

Similarly, the scope and detail required in drawings or plan 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 public health engineer before submitting their application. This will ensure that public health engineers receive the information they consider necessary in the circumstances, without requiring the applicant to incur unnecessary effort or expense.

In any case where an person applies for a construction permit after construction has already commenced, the principles set out in Part 4, section 3.13.3 should e applied.

1.3. 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 ongoing operation of the 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. 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 Chief Engineer.

Generally speaking, the responsible person should be one who will have the authority and resources to operate the system on a daily basis. The information required in this regard may vary, depending on whether the operator 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, is 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

Applications by or on behalf of local governments

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

Applications by or on behalf of partnerships

- Copies of any certificates or registration statements filed by the partnership with the Registrar of Companies, and any acknowledgements by the Registrar of Companies.
- 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 *Company Act* 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

It is important to note 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.

1.4. 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. For this reason, before a construction permit is issued, the issuing official should consult with the person who will be responsible for considering an application for an operating permit in respect of that system. 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 have 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 Highways approving officers, given their responsibility for subdivision approvals in rural areas and the approving officers' information in respect of servicing issues.

- Ministry of Environment, given its 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 in appropriate cases which to consult with specialists concerning matters that are out side the expertise of the issuing official. While most specialist consultation 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 if he or she wishes. 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.

Having said all the above, the is no requirement that consultations occur with other officials, and this is a matter for the issuing official's discretion.

In any case 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.

Issuing officials may also choose to inform other agencies when construction 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.

1.5. Deciding whether to issue a construction permit

1.5.1. 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 section 7(3)(a) of the Act
- Any relevant technical reference and best practices documents (see appendix 6)
- 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 local water quality information when considering which water analyses should be required under section 7(3)(a).

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.

1.5.2. Decision-making process

In deciding whether to issue a construction permit, the fundamental consideration should be whether the proposed system meets appropriate public health engineering standards for that type of system and whether that system will have sufficient ability to provide appropriate water to the intended user, having regard to the water source, quality and potential threats that the system may face from source to tap and the ultimate use of that water. This will generally include the

basic requirement to provide potable water, although that requirement does not apply in relation to:

- Small 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)

In considering and making decisions regarding the issuance of construction permits, issuing officials may wish to refer to the reference documents set out in appendix 6, 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:[25]

<u>New systems</u>

- 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.

- 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 to provide for:

  - 4 log (99.99%) removal or inactivation of viruses
  - 3 log (99.9%) removal or inactivation of *Giardia* and *Cryptosporidium* cysts
  - <=1 NTU for turbidity[26]

[25] 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.

[26] In cases where an area or water system has a history of outbreaks of disease or particularly poor source water quality, higher log removal for these parameters may be required.

(as contemplated by the US Environmental Protection Agency standards[27] and the Guidelines for Canadian Drinking Water Quality)

Unless the applicant can satisfy the issuing official that:

(a) there is no appreciable risk to public health in respect of these parameters, having regarding to the circumstances of that water supply system[28], or

(b) If some appreciable risk does exist for certain parameters, it is acceptable from a public health perspective, having regard to the circumstances of that water supply system, and the applicant has a continuous improvement plan that will address treatment for these parameters within a period of time that is considered reasonable in the circumstances.

- In addition, the issuing official should consider the suggested parameters for chemical standards as set out in the Canadian Drinking Water Guidelines (http://www.hc-sc.gc.ca/hecs-sesc/water/dwgsup.htm) and determine whether, in relation to that proposed water supply treatment, the issuing official has reason to believe that monitoring and treatment for any of the chemical parameters is necessary to protect public health. In this regard, issuing officials may wish to consider whether the water will be consumed by persons on an ongoing or seasonal basis, special vulnerabilities of intended users (e.g. school children), or other such matters. The parameters for which testing will be required may depend on water source, type of system, location etc., and this is a matter for the discretion of the issuing official. In general, the issuing official should consider whether to require the following information, along with any other information considered necessary in relation to that water system:

  For surface water sources (includes ground water under the influence of surface water):

Alkalinity	Fluoride	Nitrite (dissolved)
Ammonia	Hardness	Organic Nitrogen
Calcium	Iron	pH
Chloride	Manganese	Sulphate
Colour	Metals Scan[29]	Total Dissolved Solids
Conductivity[30]	Nitrate (dissolved)	Total Organic Carbon
Corrosiveness[31]	Bacterial indicators	

[27] EPA Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR)? http://www.epa.gov/safewater/mdbp/lt1eswtr.html

[28] Ground water systems that the issuing official believes are not at risk of containing pathogens will generally fall under this category.

[29] Aluminum, Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Potassium, Zinc (expand if mineralized to include Mercury)

[30] Conductance/Specific Conductance

[31] Calcium Carbonate saturation/Langelier's index

Turbidity	Bromide (for systems using ozone)

For ground water sources:

Alkalinity	Fluoride	Phosphorous
Ammonia	Iron	Sodium
Calcium	Hardness	Sulphate
Chloride	Magnesium	Sulphide
Colour	Manganese	Total Dissolved Solids
Conductivity[32]	Metal Scan[33]	Total Organic Carbon
Corrosiveness[34]	Nitrate	Uranium
	pH	Turbidity

- The issuing official should consider requiring two forms of treatment for surface water or ground water under the influence of surface water. Typically, these would be filtration and disinfection, unless the applicant can satisfy the issuing official that this is not required to adequately address risks to public health. Each of the two forms of treatment must achieve by itself the total inactivation or removal of one of the three pathogen types and the two forms of treatment together would meet the overall treatment requirements referred to above.

- The issuing official should consider whether, and at what levels, disinfectant residuals are to be present in the distribution system. In making this decision, 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.

- Except in the case of a small system to which section 3.1 of the Regulation applies, 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. The disinfection/treatment should result in water that meets the accepted levels as outlined above. (See Regulation, section 5 (2)). Unlike the former *Safe Drinking Water Regulation*, there is no ability for a medical health officer to waive this requirement under the Act and Regulation.

- 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. It is

[32] Conductance/Specific Conductance
[33] Aluminum, Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Potassium, Zinc (expand if mineralized to include Mercury)
[34] Calcium Carbonate saturation/Langelier's index

however important to note that this is only one relevant factor and each situation must be considered on its own merits, having regard to all relevant factors.[35]

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.[36] 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 the that 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. advise the drinking water officer regarding the issuance of the construction permit

Small systems that are exempt from the requirement to provide potable water

Where applications are made for small systems (serving less than 500 people per day) 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:

[35] In any case 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."

[36] 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.

(a) Systems that do not provide water for human consumption or food preparation and are not connected to a water supply system that does.

- 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).
- The nature and extent of public health threat if the proposed system was inadvertently or intentionally used for human consumption or food preparation.

(b) Systems that provide water only to Point-of-Entry or Point-of-Use systems.

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

- Whether the issuing official considers overall that 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:
  - Whether the POE or POU devices being used have received certification by an accredited third party agency as complying with standards established by an independent and respected national or international standard setting agency,[37] 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 in accordance with the manufactures suggestions or as directed by the issuing official;
  - 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;

[37] 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

- 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 developer 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,
- In any case 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).

It is however, important to note that 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.

1.6. 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 as such.

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 noted above 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 8. 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.

1.7. 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 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.

Generally speaking, 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.

1.8. Form of permit

Neither the Act nor Regulation specifies the form of a construction permit. A sample standard form permit is however set out in appendix 9.

1.9. Pre and post- approval inspections

Pre and post-approval inspections can be undertaken in any case 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.

However, 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 may 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.

1.10. 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)).

In order 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.

1.11. 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 in any cases 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.

In addition to potentially requiring a construction permit, 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 personally 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.

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.

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[38] has delegated this power.

[38] In this context, the term "drinking water officer" refers only 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. I.e. a person delegated powers is not able to further delegate them to another person.

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 10 sets out a sample application form for an operating permit, and related instructions, for consideration. Health Authorities may wish to use these forms, or to replace them with standard forms for use within their authority.

2.3. Confirming a responsible person and specifying owners

Before issuing an operating permit, the issuing official should ensure that a person has been identified as being responsible for the ongoing operation of the system (See Act, section 17) and that other potentially responsible persons and "owners" are identified. 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 Registrar of Companies, and any acknowledgements by the Registrar of Companies.
- 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 *Company Act* 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.

2.4. Consultation with other officials

When considering applications for operating permits, issuing officials should consult with the person who issued the construction permit. The using 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.

In any case 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.

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.

2.5. Deciding whether to issue an operating permit

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 results of water quality analyses provided in the application for construction permit, as required by section 7(3)(a) of the Act
- Any relevant technical reference and best practices documents (see appendix 6)
- Whether a construction permit has been issued and any conditions attached to it[39]
- 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 non-existence 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 issued under the *Utilities Act*. Potentially relevant statutes are discussed further below in Part 5, section 4.[40]

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.

2.5.2. Decision-making process

[39] 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. In any case 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.

[40] 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 the other 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.

In deciding whether to issue an operating permit for a new water system, consideration should be given to the matters discussed above in relation to construction permit applications. Namely, the primary consideration should be whether the proposed system will, if operated in accordance with the terms and conditions of the permit, 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
- 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 developed under section 1.5 above
- 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 immunocompromised users
- History of water-borne diseases
- Historical water quality and
- Whether the water is for purposes or provided in circumstances that are exempt from the potability requirements of the Act
- 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 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. In each case, however, 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.

Small systems that are exempt from the requirement to provide potable water

Where applications are made for small systems (serving less than 500 people per day) 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 a water supply system that does.

- 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).
- 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 the need for signs to advise the users.

(b) Systems that provide water only to Point-of-Entry or Point-of-Use systems.

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

- 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 with respect to threats that may arise and for which 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;[41]
  - 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;
- In any case 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 1.5.2 above); and,
- In any case 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.

[41] In any case where a pilot study is conducted, the system must nonetheless 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 whatever terms and conditions he or she considers necessary, to provide reasonable safeguards for public health while the pilot study is being undertaken.

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
- Standards applicable to the water in the water supply system
- Reporting and publication of monitoring results for other information respecting the water supply system. (Act, section 8(3))[42]
- Well protection and source protection
- Maintenance and servicing of Point-of-Entry and Point-of-Use systems[43]

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 speaking, 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.

First, 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

[42] 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.
[43] 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.

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.

Second, 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 of public health are addressed. To help facilitate the exercise the discretion in this regard, appendix 11 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 12.

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 EOCP) for persons who operate system classified by EOCP as level 1, 2 or 3. Generally speaking, these are systems other than "small systems".[44] Persons who operate, maintain or repair such systems must be appropriately certified by EOCP. EOCP certification involves four elements:

1. System classification

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

2. Operator Training

   A water system operator may be trained on the job, usually with some classroom or distance educational training (i.e. BCWWA; Alberta course; Sacramento program, etc.)

3. Operator experience

   Operator must have specified types and amounts of practical experience

4. Operators Certification

   Upon completion of the operator training, the EOCP certification exam may be taken.

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

[44] For further information on the EOCP classification system, see http://www.eocp.org/certpg.html.

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.

[For discussion of alternate approaches, see Draft Fraser Health approach, appendix 35]

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 whether to impose such a term and condition is one for the drinking water officer to make, in his or her discretion. Generally speaking, the requirement for operator certification should be imposed on small systems, through operating permit terms and conditions, in cases where the drinking water officer considers that there is something about the system in question or the persons operating it that require 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).

It should also be noted that 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[45] etc. The terms and conditions could also include requiring the water supplier to prepare an operations guide for the system,[46] or the have the system inspected form 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, it is essential to note that 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.

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. 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.

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 13 for consideration.

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[45] http://www.watersafebc.ca

[46] The BCWWA website provides information that people may refer to in order to obtain assistance in preparing such operational guides. (See www.bcwwa.org)

2.9. Changes

In any case 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.

In any case 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, then 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 as discussed above, 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.

PART FOUR - ONGOING FUNCTIONS OF DRINKING WATER OFFICERS

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) [47]
- 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.

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

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

ensure that any such number is staffed by a person who is, in turn, able to immediately contact the drinking water officer or another appropriate official.

1.1. Routine monitoring and inspections

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 section 61 of the *Health Act*. That section states:

61 (1) A health officer, medical health officer or public health inspector may enter on or into any property and conduct an inspection for the purpose of determining

(a) whether a health hazard exists, or

(b) whether this Act and the regulations are being complied with.

(2) The authority under subsection (1) must not be used to enter a private dwelling except with the consent of the occupant or as authorized by a warrant under this or another Act.

(3) An inspection under subsection (1) may be conducted

(a) at any reasonable hour of the day or night, or

(b) at any other time if the person conducting the inspection has reason to believe that a health hazard exists.

(4) A person conducting an inspection under subsection (1) may do one or more of the following for the purposes of the inspection:

(a) bring along any equipment or materials required for the inspection and be accompanied and assisted by a person who has special, expert or professional knowledge of a matter relevant to the inspection;

(b) inspect any records that may be relevant to the purpose of the inspection and make copies of them or remove them temporarily for the purpose of making copies;

(c) require a person to produce within a reasonable time records in the person's possession or control that may be relevant;

(d) inspect any works, equipment, clothing, food, medication, other substances, animals or any other thing at the place;

(e) Take photographs or make other recordings in respect of the place;

(f) Take samples and perform tests, including tests in which a sample is destroyed;

(g) require that a place not be disturbed for a reasonable period of time or that a tool, equipment, machine, device or other thing or process be operated or set in motion or that a system or procedure be carried out;

(h) question persons with respect to matters that may be relevant, require persons to attend to answer questions and require questions to be answered on oath or affirmation;

(I) attend a relevant training program of an employer;

(j) exercise other powers that may be necessary or incidental to the carrying out of the person's functions and duties under this act or the regulations.

(5) If a health officer, medical health officer or public health inspector removes any records under subsection (4) (b), the officer or inspector must

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

(b) promptly return the records when they have served the purposes for which they were taken.

(6) If a person conducting an inspection under this section requests this, a peace officer may assist the person in carrying out his or her functions and duties under this act or the regulations.

These inspections powers may be particularly important in relation to Point-of-Entry and Point-of-Use treatment systems, as these might not[48] 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.

It should also be noted that 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 therefore be used in relation to systems serving a single family residence.

[48] 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", discussed above.

1.1.2. 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.

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)[49]
- Review monitoring and other records (including operational logs, results of confirmation of adequacy of treatment, chlorine residual levels),
- 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 5 below)
- Review the status of the water supplier's continuous improvement plan (if any)
- Consider whether an assessment under section 19 is required.

[49] For emergency response plans respecting small systems, see http://www.healthservices.gov.bc.ca/protect/pdf/PHI061.PDF

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, however, set out in appendix 14.

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 contrast, occurs when an official has some reason to believe that a form of noncompliance exists, and the 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, in any case 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 impaired the ability to investigate)
- Take notes of all discussions and observations
- In any case 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.

1.2.1 Requests for investigations

Section 29 of the Act 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.

Requests for investigation can be made by any person.

Although section 29 refers to requests being in writing, requests can also be made verbally. In those cases the formal provisions of section 29 – including a right to a response – do not apply. However, the same practices can be adopted, and if a request is made verbally to a drinking water officer, the drinking water officer should either consider it on that basis or, if he or she prefers, request the person to put the request in writing. No request for an investigation should be disregarded merely because it was made verbally.

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[50]
- 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*)[51]

If the drinking water officer decides not to conduct an investigation, he or she should provide a basic explanation as to why the decision was made. Drinking water officers are encouraged to provide this in writing where practicable, particularly if the allegations made were significant. However, it is also important to recognize that drafting of such letters can require dedication of time that might otherwise be spent on other activities. As such, notice may be given orally if the drinking water officer considers that sufficient in the circumstances. In cases where such notification is given orally, the drinking water officer should make a note to file to this effect.

When an investigation is conducted, the drinking water officer must advise the person who requested the investigation, and advise them of the results (section 29(4)(a)). When doing so, 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 degree of information and detail required will vary on the facts of the case, having regard to factors such as the seriousness of the threat investigated, the complexity of the investigation, and the potential impact on the person making the complaint. However, there is no requirement that drinking water officers provide exhaustive and exceptionally detailed reasons, and it is sufficient if the reasons provide enough information to allow the recipient to understand the decision and the basis upon which it was made.

Drinking water officers are again encouraged to provide this in writing where practicable, particularly if the allegations made were significant. However, such advice may be given orally

[50] In some cases, the person requesting the investigation may in fact be the water supplier

[51] It is important to note that the mere 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

if the drinking water officer considers that sufficient in the circumstances. In such cases, the drinking water officer should again make a note to file to this effect.

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.

It is important to note that nothing in the *Drinking Water Protection Act* or the *Health Act* allows 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.

In any case where 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 in 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.

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relation to a matter. Such situations should be carefully assessed in accordance with the principles for cooperation

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 *Health Act*. However, the relevant legal standards and process may differ somewhat from a warrant requested under the *Drinking Water Protection Act.* If in any case 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.

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with other agencies, discussed below in Part 5, section 4.

1.4. Reports that must be made by water suppliers and laboratories

As noted in Part 2, section 2, 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.

In addition, reports may be made by laboratories under section 12 where immediate reporting standards are not met.

In order to facilitate timely and effective reporting by laboratories, some health authorities have established protocols that provide 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), and have a supporting internal system to ensure that information is provided to the appropriate drinking water officer or medical health officer.

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.

2. Obtaining further information

In any case where 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.

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. These additional monitoring and reporting requirements can be imposed without the necessity of 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 that are not themselves "water supply systems" under the Act, 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 any person to provide information and undertake tests under section 25(3((a) and (b) of the Act (provided the test for issuing a hazard abatement and prevention order exists, discussed below)

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 systems" (section 19(1)).

The term "threat" is defined in section 1 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.

It should also be noted that 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))

2.2.1. Process for assessments

Neither the Act nor the Regulation set out the specific process by which an assessment must be completed. Unless and until any such regulations are developed, 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).

To help provide some guidance to drinking water officers and water suppliers in relation to assessments, the Ministry of Environment and the Ministry of Health have developed two assessment tools for consideration. These are the Screening Tool Assessment (appendix 15) and the Comprehensive Assessment Guideline (appendix 16).[52] These documents have been developed on the basis of extensive 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. That said, there is however 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.

In any case where a drinking water officer directs 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

[52] 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.

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 17 sets out a sample letter for this purpose.

Finally, it should be noted that 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 Screening Tool Assessment (appendix 15) and the Comprehensive Assessment Guideline (appendix 16) 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 Screening Tool Assessment (appendix 15) and the Comprehensive Assessment Guideline (appendix 16).

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;[53]
(c) Infrastructure improvements;
(d) Cooperative planning and voluntary programs;
(e) input respecting local authority zoning and other land use Regulation.

When requesting 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.

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.

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

[53] See appendix 6.

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.

It is also important to note that 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 Part 5, section 4 below). Although drinking water officers will not have authority under those other acts (with a few exceptions to the *Water Act*, discussed in Part 5 of section 4 below), they should be aware of and consult other agencies in cases when they consider that appropriate.

3.1. Amending an operating permit

This option should be used in any case where 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 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.").

It is important to note that 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, in fact, 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. Having said this, 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.

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[54], but there is some concern about the ability of the operator to respond appropriately if concerns do arise.

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. In practice, in many cases 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.

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 in order under section 10(2) of the Act.

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[54] 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;

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

Is important to note that 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.

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, whereas an order under section 14 is not

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

Generally speaking, 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*).

- 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 in a manner 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.[55]

In deciding whether to require 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, in any case where they believe the public notice is required, they are able to provide a rationale for this determination.

Drinking water officers should also provide the water supplier with an opportunity to make their views known and considered where possible, provided that no significant delay occurs on this

[55] For additional reference materials on issuing boil water notices, see Guidance for Issuing and Rescinding Boil Water Advisories **at** http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/doc_sup-appui/boil_water-eau_ebullition/index_e.html

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.

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.

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 18. A sample form Request Respecting Public Notice is set out in appendix 19.

Finally, it is important to note that 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. In fact, 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)).

3.3.4. Type of notice

In the past, public health officials have traditionally 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 20.

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 21.

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 22.

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 in fact 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

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 be 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.

In any case where non-compliance with a public notification order is found to exist, 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 undertaking direct provision of information to affected persons.

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 displacement has occurred in the distribution system to eliminate any remaining contaminated water.[56]

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.

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 Part 5, section 4 below).

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[56] For additional reference materials on rescinding boil water notices, see Guidance for Issuing and Rescinding Boil Water Advisories at http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/doc_sup-appui/boil_water-eau_ebullition/index_e.html

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)).

One of the important implications of issuing a hazard abatement or prevention order is that, 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 3.8.

A sample for hazard abatement and prevention order is set out in appendix 23.

(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.)

3.6. Orders under the 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 Health Act or any other enactment

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

One of the most significant sections to consider in this regard is section 63 of the *Health Act*. It states

> (1) If, after an inspection under section 61, the health officer, medical health officer or public health inspector has reason to believe that
>
> (a) a health hazard[57] exists,
>
> (b) there is a significant risk of an imminent health hazard, or
>
> (c) the place that was the subject of inspection or the owner or occupier of it is in contravention of this act or the regulations,
>
> the health officer, medical health officer or public health inspector may issue an order under this section.
>
> (1.1) An order under this section may be directed to
>
> (a) a person whose action or omission resulted in or significantly contributed to the health hazard, significant risk or contravention,
>
> (b) a person who had possession, charge or control of the condition or thing that constitutes the health hazard or risk at the time it arose, or

[57] The term "health hazard" is defined in section 1 of the *Health Act* in a manner that it is very similar to the definition of "drinking water health hazard" in section 1 of the *Drinking Water Protection Act*. Specifically, the term "health hazard" is defined in the *Health Act* as:

> (a) a condition or thing 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;

(c) the owner or occupier of the place where the health hazard, risk or contravention exists.

(2) An order under this section must be served on the person to whom it is directed, and must set out the reasons it was made, what the person is required to do and the time within which this must be done.

(3) If the order is directed to a person who is not the registered owner of the property on which the action is required to be taken, a copy of the order must also be served on the registered owner.

(4) An order may include, but is not limited to, provisions for the following:

(a) requiring the vacating of the place or a part of it;

(b) declaring the place or a part of it to be unfit for human habitation;

(c) requiring the closure of the place or a part of it;

(d) requiring the doing of work specified in the order, in, on or about the place;

(e) requiring the removal from the place or the vicinity of the place of anything that the order states causes a health hazard;

(f) requiring the destruction of anything specified in the order;

(g) prohibiting or regulating the selling, offering for sale, supplying, distributing, displaying, manufacturing, preparing, preserving, processing, packaging, serving, storing, transporting or handling of food or thing in, on, to or from the place.

(5) If the health officer, medical health officer or public health inspector considers the situation is urgent, that official may issue an order orally, in which case the official must serve a written version of the order in accordance with this section as soon as reasonably possible.

(6) If a health officer, medical health officer or public health inspector makes an order under this section, that official may

(a) direct that, if the person fails to take the action required by the order, the required action is to be done at the expense of that person, with the costs and expenses incurred recoverable under section 74 or 75, and

(b) enter or authorize other persons to enter on or into any property that is subject to the order for the purpose of

(I) determining whether the order is being complied with, or

(ii) taking action in default under paragraph (a).

(6.1) As restrictions on subsection (6),

(a) except in the case of an emergency, before taking action under that subsection, the person making the order must give notice to the person subject to the order,

(b) except in the case of an emergency, a person authorized to enter property under that subsection must take reasonable steps to notify the owner or occupier before entering the property, and

(c) the authority must not be used to enter a private dwelling except with the consent of the occupant or as authorized by a warrant under this or another Act.

> (7) If an order is issued under subsection (4) (a), (b) or (c), the health officer, medical health officer or public health inspector must ensure that a copy of the order, or in the case of an oral order, a notice of the requirements of the order, is posted in a conspicuous place at, on or near the public place or private place to which the order relates.
>
> (8) A health officer, medical health officer or public health inspector must
>
> (a) maintain a record of all orders issued under subsection (4) (a), (b) or (c), and
>
> (b) make the record available for inspection by the public during the business hours of his or her office.
>
> (9) If, in the course of an inspection under this Act, the health officer, medical health officer or public health inspector is of the opinion that a condition of emergency exists due to the existence of a health hazard, the health officer, medical health officer or public health inspector may, despite anything in this Act, promptly take any steps the health officer, medical health officer or public health inspector considers appropriate to remove or lessen the health hazard.

One important difference between a hazard abatement and prevention order under the *Drinking Water Protection Act* and an order under section 63 of the *Health Act* is that violations of orders under section 63 of the *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, and without the need for any approval by Crown Counsel to pursue charges in court.

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 the 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 to be taken under section 27, discussed below, 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) discussed below 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.

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.

In any case 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 24.

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.

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 74(3) and (4) of the *Health Act*. These sections allow the costs to be added to the property taxation bill for the property in question, and provide that:

> … amount is deemed to be a municipal or Provincial tax, as applicable, and must be dealt with in the same manner as taxes against the property would be under the *Local Government Act*, *Taxation (Rural Area) Act* or *Vancouver Charter*, as applicable.

Under these sections, the costs incurred by the health authority would only be forwarded by a taxing authority once they are collected from the property owner. If the taxes were not paid, then the local government could potentially sell the property.

A sample form of the certificate that must be filed under section 27(4) to invoke these sections of the Health Act is set out in appendix 25.

Cost recovery under section 27 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.

3.10. Orders respecting contraventions

Section 26 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, it is important to note that a contravention order does not itself institute any form of charge and court proceeding. Such proceedings may only be initiated through a report to Crown Counsel and related decision by Crown Counsel to pursue charges for an offence.

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 above, if the person to whom it is addressed does not undertake the action required.

A sample form contravention order is set out in appendix 26.

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). 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.

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.

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.

3.13. Problem systems

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 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 27

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 28.

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 indeed no legal "owner", to consider possible options and strategies for addressing public health threats in relation to that system.

It is important to note that, 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 above).

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 speaking, 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 Services 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)

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[58] 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 3.10 of this Part)
- Charge for an offence (see section 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 3.3 (public notice of threats), 3.5 (hazard abatement and prevention), 3.7 (direct action by drinking water officer), 3.8 (action in default) and 3.9 (cost-recovery) of this Part of this Guide.

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 and 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] 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

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.

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(b)). However, these water systems do remain subject to other provisions of the act. 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:

- It is important to note that, even where the exemption from section 6 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 in fact 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(2) of the Regulation, and that in certain cases, the water supplier 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.

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 the case where 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 in any case where source protection presents challenges in respect of a water supply system. Many of these 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, 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 Part 4, section 2.2 of this Guide)
- Designation by regulation of other officials that must report to the drinking water office anything that may be a threat to drinking water under section 24(2) (See Part 4, section 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)[59]

[59] 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.

- Establishment of a drinking water protection plan under Part 5 of the Act, which can result in a wide range of outcomes including potentially 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 Part 1, section 4.5 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 Part 5, section 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. 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. 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 in respect of public health matters.

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.

In any case 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 any such 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 104.1 of the *Health Act* applies in relation to an offense under this act. Section 104.1(1) of the *Health Act* allows a court to impose a range of orders to ensure remedial action and prevent future non-compliance. It states:

> (1) If a person is convicted of an offence under this Act, in addition to any punishment imposed, the court may, having regard to the nature of the offence and the circumstances surrounding its commission, make an order containing one or more of the following prohibitions, directions or requirements:
>
> > (a) prohibiting the person from doing any act or engaging in any activity that may, in the opinion of the court, result in the continuation or repetition of the offence;
> >
> > (b) directing the person to take any action the court considers appropriate to remedy or avoid any harm to the environment that resulted or may result from the commission of the offence;
> >
> > (c) directing the person to pay the government an amount of money as compensation, in whole or in part, for the cost of any remedial or preventive action taken by or caused to be taken on behalf of the government as a result of the commission of the offence;
> >
> > (d) directing the person to perform community service;

> (e) directing the person to post a bond or pay into court an amount of money the court considers appropriate for the purpose of ensuring compliance with any prohibition, direction or requirement under this section;
>
> (f) directing the person to submit to the minister, on application by the minister within 3 years after the date of the conviction, any information respecting the activities of the person that the court considers appropriate in the circumstances;
>
> (g) directing the person to publish, in any manner the court considers appropriate, the facts relating to the commission of the offence;
>
> (h) requiring the person to comply with any other conditions that the court considers appropriate for securing the person's good conduct and for preventing the person from repeating the offence or committing other offences under this Act.

(Related provisions are set out in subsections 2-7), which are not reproduced here.)

Drinking water officers should keep the provisions of section 104.1 of the *Health Act* in mind when deciding whether it is appropriate to seek to charge a person for an offense under the Act.

4.1.1. Limitation period

Section 45(5) 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, in any cases 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.

4.2. Violation tickets

At the present time, none of the offences under the *Drinking Water Protection Act* have been designated as offenses for which a ticket can be issued under the *Offence Act* and the *Violation Tickets and Fines Administration Regulation*. However, it is important to note that nothing in the *Drinking Water Protection Act* affects the application of the *Health Act*, and there may be some circumstances in which the facts giving rise to an offense under the *Drinking Water Protection Act* could also constitute an offense under the *Health Act*. This includes failure to report spills under section 55 of the *Health Act*, and failure to comply with health hazard abatement orders under section 63 of the *Health Act* (discussed above in section 3.6 of this Part). As such, a ticket under the *Health Act* can still be issued in appropriate cases, even if the violation of the *Health Act* occurs in relation to drinking water matters.

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" which requires the person to stop contravening the Act, regulations or order, or which requires the person to 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 with it, they are not only in noncompliance with the Act, but they would also be in contempt of court.

It should also be noted that an order to require compliance under section 42 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.

In any case 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.

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 not unlimited, it is important to ensure that oversight and compliance activity is prioritized to ensure that resources are allocated based on a principled and risk-based policy.

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
- 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

The following assessment tool has been developed and used by one Health Authority and may be useful to use, recognizing that the final decision of risk rating is one for the drinking water officer to make in his or her discretion.

Item	Risk Rating

Number Of Connections	
More than 300 connections	5
15 to 300 connections	4
Less than 15 connections	3
Population Served	
> 10 000	10
> 1 000	8
> 100	5
> 10	3
High Risk Populations	
List of High Risk Populations	Hospitals
	Child Care
	Adult Care
	Camps/Campsite
	Schools
	Restaurants
Amount for Each Population	1
Water Source	
Surface Water	10
Combined	8
Shallow Well	7
Deep Well	3
Surface Water Treatment	
Not Disinfected	15
Disinfected	10
Disinfected, Residual	8
Disinfected, Parasite Reduction	6
Disinfected, Parasite Reduction, Residual	2
Shallow Well Water Treatment	
Not Disinfected	12
Disinfected	10
Disinfected, Residual	8
Disinfected, Parasite Reduction	6
Disinfected, Parasite Reduction, Residual	2
Deep Well Water Treatment	
Untreated	5
Treated	1
1. Bacteriological History	
Current Permanent Boil Advisory	15
Current Periodic Boil Advisory	12

Past Boil Advisories or Periodic Unsatisfactory Results	9
Meets Guidelines	1
2. Chemical History	
Insufficient Chemical Analysis History	5
Chemical Contamination Identified - No Treatment	5
Chemical Contamination Identified - Appropriate Treatment	3
Meets Guidelines	1
3. Emergency Plan	
Not Submitted	10
Incomplete Plan	5
Complete Plan	1
4. Maintenance	
Insufficient Information	15
Poor Attention	12
Moderate Attention	4
Excellent Attention	1
5. Staff Training	
Insufficient Information	10
No Training	10
Some Training	5
Completed Certificate Program	1
Hazard Rating Upper Limits	
Total Possible:	101
High	101
Moderate	65
Low	45

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.

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, it is important to note that 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.[60] 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.

[60] 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".

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 however at any time 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.

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 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 as work proceeds in this regard.

PART FIVE – MISCELLANEOUS

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[61] 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 office 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.

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

[61] 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.

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 what new evidence they have 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 29. 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.

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 on a review.

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 30. 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.

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 above). The person can also request a review after reconsideration, if the person is still dissatisfied with the decision.

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 31.

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 speaking, 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

In any case 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.

2. Application of Act to Indian reserves and 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 Indian reserves or other federal land.

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) *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 this section and an order of a medical health officer under section 63 of the *Health Act*, the order of the medical health officer prevails.

Similarly, section 23(3) provides that the prohibitions against contaminating drinking water or tampering with the system in that section do not apply if the introduction or activity is authorized or required by or under another enactment. It is however important to note that 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 act noted (or regulations made under the act), and in any case where 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.

3.1. Health Act

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

3.2. Water Act

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[62] under this act.

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*.[63]

Similarly, the mere fact that something is authorized under the *Drinking Water Protection Act* does not serve to authorize it under the *Water Act*. I.e. 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* if the water comes from surface water sources. 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.

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[62] 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 preventing or extinguishing fires,
> (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,
> and includes access roads to any of them.

[63] As discussed in Part Two, section 1 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 form the definition of

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

3.2.2. Ground Water Protection

When the *Drinking Water Protection Act* was passed, significant additions and amendments were made to the *Water Act* to better deal with ground water protection. These provisions, and related sections in the *Ground Water 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

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

The ground water protection provisions of the *Water Act* and the *Ground Water Regulation* are administered by official 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*.

"domestic water system", which is used in the definition of "water supply system". See Act, section 1 and Regulation, section 3)

The new 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 of 5 of the *Drinking Water Protection Act*. Given the potential for overlap, the acts provide that, if plans are to be developed under both acts in respect of a particular area, the plans can be developed jointly. Further, they 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. To date, government has not established any such regulations.

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

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.

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.

3.5. Local Services Act (Subdivision Regulation)

Under 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 Regulation* 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 Regulation 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[64] 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* 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,

[64] 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*

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.

3.6. Environmental Management Act

The *Environmental Management Act* replaced the *Waste Management Act* and 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*. It is also worth noting that 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*. Again, 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 is 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/epdiv/env_mgt_act/index.html.

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 of Environment to designate areas and set water quality objectives in relation to community watersheds (section 150).

- allowing the Minister of Environment to designate areas and set objectives generally in watersheds with significant downstream fisheries values and significant watershed sensitivity (section 150.1)
- Allowing the Minister of Forests 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)

Under this act, sections 59 and 60 of the *Forest Planning and Practices Regulation* 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 Licence Planning and Practices*, all established under this act.

Drinking water officers may wish to consult with local Ministry of Forest officials in cases where the drinking water officer believes this act may have relevance to drinking water issues.

4. Strata corporations

When water is supplied to strata owners by or through a strata corporation, the question arises whether the strata corporation is a water supplier for the purposes of the Act. The answer to this question will depend on whether the strata system falls within the definition of "domestic water system". This is a legal question that should be determined in consultation with legal counsel for the health authority as necessary, but in general the strata corporation will likely fall under the Act on the basis that the system constitutes a domestic water system, unless it is a "building system". As noted earlier, that term 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.

5. Relationship between DWO activities and officials from other agencies

As noted above, there is 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, and it may, in some circumstances, 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 drinking water officers (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 one examines the various relevant acts in some detail, as they often disclose slightly different requirements and procedures that may make reliance on another agency inappropriate from the public health perspective even though, at first glance, 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 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 waster protection

    (b) The drinking water officer remains apprised of the situation and actions being taken by the other agency(ies) and resumes directly 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 appropriately 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 person).

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