

Drinking Water Source-to-Tap Screening Tool



Ministry of Health Services
Ministry of Water, Land and Air Protection
2004

What is the Drinking Water Source-to-Tap Screening Tool?

The Drinking Water Source-to-Tap Screening Tool is a simple questionnaire designed to assist water suppliers to determine risks to drinking water sources and systems. It is one of several tools that water suppliers and health authorities can use to ensure that drinking water delivered to the public from water supply systems is safe to drink.

Why was the Screening Tool developed?

B.C.'s *Drinking Water Protection Act*, which came into effect in May 2003, outlines new responsibilities for water suppliers and health authorities to protect drinking water quality, and creates the new position Drinking Water Officer to oversee the Act. Government also published an Action Plan for Safe Drinking Water in British Columbia which includes additional commitments to drinking water protection.

In order to meet the commitments of the action plan, and the requirements of the Act, information about water supply systems is required by both water suppliers and drinking water officers. The Screening Tool has been developed as one means to help gather the necessary information.

How will the Screening Tool be used?

This Screening Tool can be used by water suppliers to inventory and assess the drinking water source for the water supply system, including land use and other activities and conditions that may affect that source, the water supply system, including treatment and operation, monitoring requirements for the drinking water source and water supply system, and threats to drinking water that is provided by the system.

Once completed the screening tool can be used by a water supplier to identify steps that need to be taken to improve the water supply system and protect consumers' health.

Who's responsible for what?

Water suppliers should be able to complete the Screening Tool questionnaire themselves, but should contact their local Health Authority for assistance if necessary. Additional information needed to complete the Screening Tool, such as information on source water activities, may also be available through other regional government offices.

Contacting B.C.'s Health Authorities

<p>Northern Health Authority Suite 300 - 299 Victoria Street Prince George, B.C. V2L 5B8 Phone: (250) 565-2649 Fax: (250) 565-2640 URL: http://www.northernhealth.ca</p>	<p>Interior Health Authority 2180 Ethel Street Kelowna, B.C. V1Y 3A1 Phone: (250) 862-4200 Fax: (250) 862-4201 URL: http://www.interiorhealth.ca</p>
<p>Vancouver Island Health Authority 1952 Bay Street Victoria, B.C. V8R 1J8 Phone: (250) 370-8699 Fax: (250) 370-8750 URL: http://www.viha.ca/</p>	<p>Vancouver Coastal Health Authority Suite 200, 520 W 6th Ave Vancouver, B.C. V5Z 4H5 Phone: Toll Free 1-866-884-0888 Local (604) 736-2033 Fax: (604) 874-7661 URL: http://www.vancoastalhealth.ca/</p>
<p>Fraser Health Authority 300 - 10233 153rd Street Surrey, B.C. V3R 0Z7 Phone: (604) 587-4600 Fax: (604) 587-4666 URL: http://www.fraserhealth.ca</p>	<p>Provincial Health Services Authority 700-1380 Burrard St Vancouver, B.C. V6Z 2H3 Phone: (604) 675-7400 Fax: (604) 708-2700 URL: http://www.phsa.ca/default.htm</p>

A. WATER SUPPLY SYSTEM CONTACT INFORMATION

1. On what date was this assessment completed?

_____ Date completed (dd/mm/yy)

2. What is the name of the water supply system for this assessment?

The name referred to in this question is the name that appears on the Operating Permit, or usual name of the water supply system (Wickham Improvement District, Marge's Trailer Court)

_____ Name of water supply system

3. What is the location of this water supply system? (e.g. Chilliwack, Fulford Harbour)

_____ Location name

4. What type of governance structure do you have for your water supply system: (Check appropriate box)

Regional District

Water Users Community

Municipality

Private Water Utility

Improvement District

Other (specify) _____

5. What is the name and address of the owner of this water supply system?

The owner may be the governance structure listed in Question 4, a corporation, strata or an individual (Wickham Improvement District, IntraTourist Inc., Marge Bellows)

Legal name of owner _____

Street: _____

City: _____ Postal Code: _____

Phone #: _____ Cell phone #: _____

Fax #: _____ Pager #: _____

E-mail address: _____

6. Who are the contact person(s) for the governance structure?

Manager/Administrator - same as above or:

Name: _____

Street: _____

City: _____ Postal Code: _____

Phone #: _____ Cell phone #: _____

Fax #: _____ Pager #: _____

E-mail address: _____

Operator - same as above or:

Name: _____

Street: _____

City: _____ Postal Code: _____

Phone #: _____ Cell phone #: _____

Fax #: _____ Pager #: _____

E-mail address: _____

7. Who completed this assessment?

(Please indicate below the name, the agency the phone number and email address of the person who completed this assessment).

<i>Name of person who completed assessment</i>	<i>Agency or employer of person who completed the assessment</i>	<i>Phone Number and Email of person who completed assessment</i>

A.1 Administration and Management of the Water Supply System

8. Do you have an engineering assessment (e.g. engineering report and capital works plan) in place for your water supply system that was completed within the last 5 years?

- 1. *Yes*
- 2. *No*
- 3. *Unsure*

9. Do you have an up-to-date financial plan (e.g. operating budget and capital expenditure program) for your water supply system that covers a period of more than one year?

- 1. *Yes*
- 2. *No*
- 3. *Unsure*

10. Do you have liability insurance for your water supply system?

- 1. *Yes*
- 2. *No*
- 3. *Unsure*

11. Do you have an opportunity to participate in land-use decisions, such as subdivision or zoning approvals that impact your water supply system?

- 1. *Yes*
- 2. *No*
- 3. *Unsure*

A.2 Description of the Water supply system

12. **What is the approximate population size served by this water supply system?** (Put number in blank)

If the population varies seasonally, list the population served in each season.

_____ *Approximate number of people served, OR*

_____ *Approximate number served per season*

13. **How many connections does this system have?**

A connection means the service line or pipe by which a residential, commercial or industrial customer or other water user obtains water from the supplier's distribution system.

_____ *Number of connections*

14. **Does this water supply system provide water for any of the following facilities?** (Circle ALL that apply)

1. *Hospital*

5. *Child/adult care*

2. *School*

6. *Camps/campsites*

3. *Continuing care home*

7. *Restaurants*

4. *Retirement home*

8. *Special needs facility*

15. **Does this water supply system currently have an operating permit issued by the local health authority?**

1. *Yes*

2. *No*

3. *Unsure*

16. **Before undertaking new construction or modifying the water supply system, do you obtain a construction permit from the local health authority?**

1. *Yes*

2. *No*

3. *Unsure*

17. **Is there an approved Emergency Response Plan for this water supply system?**

1. *Yes*

2. *No*

3. *Unsure*

18. **Has this water supply system ever experienced water supply problems due to drought?**

1. *Yes*

2. *No*

3. *Unsure*

19. **Does this water supply system have a drought management plan?**

1. *Yes*

2. *No*

3. *Unsure*

20. **Is this water supply system currently on a boil water advisory?**

1. *Yes* *If "yes", explain:* _____

2. *No*

3. *Unsure*

21. Has this water supply system ever had a boil water advisory?

- 1 *Yes* *Details:* _____
- 2 *No*
- 3 *Unsure*

22. Are all components of this water supply system infrastructure (i.e., intake, pump house, treatment plant, reservoirs, including storage tanks) protected from tampering or unauthorized access?

- 1. *Yes*
- 2. *No*
- 3. *Unsure*

23. Are the water system facilities alarmed for situations that might affect drinking water safety (hydro failure, high or low chlorine residual, etc.) and the operator automatically alerted so that the operator can respond quickly?

- 1. *Yes*
- 2. *No*
- 3. *Unsure*

A.3 Operator Certification and Facility Classification

The Environmental Operators Certification Program is a program for the classification of water and wastewater treatment systems or facilities and certification of facility operators.

A facility is classified based on its level of complexity. The complexity of a facility or system is assessed and ranked from Small System, usually the smallest and/or least complex to Class I through Class IV, the most complex. Facility classification provides an indication of the degree of knowledge and training that will be required of an operator of that facility.

Individuals can receive water operator certification as Small Water or Wastewater System, Level I, Level II, Level III, or Level IV operators paralleling the facility classification.

Details of the EOCP criteria can be found at <http://www.eocp.org/> under the program guide section.

24. Is your water supply system classified by the Environmental Operator Certification Program (EOCP)?

1. *Yes* *If "yes" what is the Classification Level of your water supply system (Check box that applies)*
 Small Water System, or
Treatment Class I Class II Class III Class IV
Distribution Class I Class II Class III Class IV
2. *No*
3. *Unsure*

25. Is the operator(s) of this water supply system currently certified by the Environmental Operator Certification Program?

1. *Yes* *If "yes" what is the Certification Level of the most senior operator (Check box that applies)*
 Small Water System, or
Treatment Level I Level II Level III Level IV
Distribution Level I Level II Level III Level IV
2. *No*
3. *Unsure*

26. Are you having difficulty finding people with the appropriate level of certification to operate your water supply system?

1. *Yes*
2. *No*
3. *Unsure*

27. Please use this space to add comments relevant to this section for further information or clarification.

B. WATER SOURCES

For groundwater sources, please complete the chart in **Section B1 (questions 25-45)**
and

For surface water sources, please complete the chart in **Section B2 (questions 46-55)**
For the purposes of this assessment, a "spring" is considered a surface water source.

Three water sources can be included in each chart. If you have more than three groundwater or surface water sources, please make additional copies of the charts for the remaining water sources.

B.1 Groundwater Sources

Complete the following chart with information about each well used by the system, including back-up wells. If the system has more than three wells, copy this page and complete the chart for all remaining wells.-

If the system also has surface water sources, including springs, please complete the form for Surface Water Sources.

<i>Well Information</i>	Well __	Well __	Well __
<i>Answer: Write answer in the column for each well</i>			
28. What is the name and/or number of the well? <i>(e.g. Township of Langley #8, PW607, Well #2)</i>			
29. Describe the location of the well <i>(i.e. behind the school in the pumphouse, or, 30m southwest of intersection of Fir Street & 10th Avenue, or address of well)</i>			
30. GPS (Global Positioning System) coordinates (if available):			
31. Which of the following best describes this well: 1. <i>Primary (used year-round, or most of the year)</i> 2. <i>Secondary (used part of the year)</i> 3. <i>Back-up or Emergency</i>			
<p>Water well record, or well log, is a document prepared by the driller at the time of well construction. The log contains the construction details, soil layers encountered during drilling, well capacity and other important facts about the well.</p> <p>Water well records may be available on the Ministry of Water, Land and Air Protection Website: http://aardvark.gov.bc.ca/apps/wells/</p>			
32. Do you have a well log or water well record for this well? 1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>			
33. Which of the following best describes the construction of the well: 1. <i>Drilled</i> 2. <i>Excavated (dug)</i> 3. <i>Driven (sand point)</i> 4. <i>Unsure</i>			
34. Is this well less than 15 m (50 ft) deep? 1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>			

Well Information	Well __	Well __	Well __
<p>Well casing: A pipe which protects and supports the wall of the well and maintains access to the water supply.</p> <p>Well cap: a cover that screws or clamps onto the top exposed portion of the well casing to prevent contaminants from entering the well.</p> <p>Pitless adapter: specially designed and gasketed coupling, installed below the ground that pipes water from the pump discharge directly through the casing wall.</p> <p>Surface seal: a grouted annular space around the well casing which usually extends from the land surface to several metres deep. The sanitary well seal functions to prevent any contaminated surface and near surface water from seeping down the side of the well to the aquifer.</p>			
<p>35. Is this well located within 30 m (100 ft) of any surface water (lake, stream, river, or pond)?</p> <p>1. Yes 2. No 3. Unsure</p>			
<p>36. Does the well casing stick up at least 30 cm (12 in) above the ground level?</p> <p>1. Yes 2. No 3. Unsure</p>			
<p>37. Does this well have a well cap securely attached to it or is the wellhead connected directly to the distribution pipe?</p> <p>1. Yes 2. No 3. Unsure</p>			
<p>38. Does this well have a pitless adapter?</p> <p>1. Yes 2. No 3. Unsure</p>			
<p>39. Does this well have a surface seal?</p> <p>1. Yes 2. No 3. Unsure</p>			
<p>40. Is there a gap between the well casing and the surrounding ground?</p> <p>1. Yes 2. No 3. Unsure</p>			
<p>41. Is this well located in an area where there is known flooding or where water can pond?</p> <p>1. Yes 2. No 3. Unsure</p>			

<i>Aquifer Description</i>	Well __	Well __	Well __
42. Which of the following best describes the type of aquifer that this well draws water from? 1. <i>The well is completed into unconsolidated materials (sand and gravel)</i> 2. <i>The well is completed into bedrock.</i> 3. <i>Unsure</i>			
43. Is there a layer thicker than 3 m (10 ft) of clay, silt, till or hardpan above the well screen or well intake for this well? (Refer to the well log if available). 1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>			
44. Is there a written groundwater protection plan (based on the <i>Well Protection Toolkit</i> or something comparable) for this well? 1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>			
<i>Potential Contaminant Sources within 30 m of Well</i>	Well __	Well __	Well __
45. Look at the area within 30 m (100 ft) of the well. Do you see or know of any of the following activities, or natural conditions, occurring in that area? Answer: Write number in the boxes below each well	1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>	1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>	1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>
a. <i>Chemical storage (household or agricultural, including pesticides)</i>			
b. <i>Fuel storage (above ground or underground)</i>			
c. <i>Landfill, refuse storage or contaminant sites</i>			
d. <i>Manure storage or application</i>			
e. <i>Livestock</i>			
f. <i>Wildlife (deer, bear, beaver, ducks, geese, cougars, etc.)</i>			
g. <i>Other wells including abandoned well(s)</i>			
h. <i>Septic systems, (including your own or those on nearby properties)</i>			
i. <i>Major roads, drainage ditches</i>			
j. <i>Ocean</i>			
k. <i>Other (specify)</i>			

<i>Potential Contaminant Sources within 300m of Well</i>	Well __	Well __	Well __
46. Look at the area within 300 m (1000 ft) of the well. Do you see or know of any of the following activities occurring in that area? Answer: Write the number in the boxes below each well	1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>	1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>	1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i>
<i>a. Commercial/industrial fuel storage (above ground or underground)</i>			
<i>b. Commercial/industrial chemical storage, including fertilizers; pesticides</i>			
<i>c. High density residential (i.e. subdivision) areas with on-site sewage disposal (septic) system</i>			
<i>d. Intensive agriculture (e.g. commercial vegetable growing, nurseries, orchards, feed lots)</i>			
<i>e. Livestock</i>			
<i>f. Manure storage or application</i>			
<i>g. Wildlife (deer, bear, beaver, ducks, geese, cougars, etc.)</i>			
<i>h. Landfill, refuse storage, contaminated sites</i>			
<i>i. Major highway, railway, pipeline</i>			
<i>j. Other wells, including abandoned well(s)</i>			
<i>k. Recreation activities (legal or by trespass)</i>			
<i>l. Other (specify)</i>			

Source Water Quality	Well __	Well __	Well __
<i>Physical Chemical parameters: Turbidity, pH, colour, nitrate, nitrite, metals, arsenic, fluoride</i>			
<i>Microbiological parameters total and fecal coliforms, heterotrophic plate counts, E. coli</i>			
<p>47. Has the well water ever been tested at the source, before any treatment, for</p> <ol style="list-style-type: none"> 1. Physical/Chemical parameters 2. Microbiological water quality 3. Both 4. None 			
<p>48. Is the well water tested regularly at the source, before any treatment?</p> <ol style="list-style-type: none"> 1. Yes <i>If yes, please specify (a) Physical/Chemical parameters, (b) Microbiological water quality or (c) both</i> 2. No 3. Unsure 			
<p>49. Who does the regular testing?</p> <ol style="list-style-type: none"> 1. Water supply system owner or operator (supplier) 2. Health Authority (Environmental Health Officer) 3. Other (specify) 			
<p>50. Have you ever had any source water quality test results exceed the maximum acceptable concentration as stated in the "Guidelines for Canadian Drinking Water Quality" that could impact health: such as fecal coliforms, E. coli, nitrate nitrogen, arsenic, turbidity (DO NOT include aesthetic parameters such as iron, manganese, or hardness)</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Unsure 			

B.2 Surface Water Sources (including Springs)

Complete the following chart with information about each surface water source used by the system. If the system has more than three sources, copy this page and complete the chart for all remaining sources. If the system has a spring, complete this chart.

If the system also has groundwater sources, please complete the chart for Groundwater Sources.

<i>Surface Source Description</i>	Source __	Source __	Source __
<p>51. What is the name of the surface water source (e.g. <i>Twenty-one Mile Creek, Wheelbarrow Springs</i>)</p>			
<p>52. Describe the intake location of the surface water source: (i.e. <i>On east bank of Cleanwater Creek, 1 km upstream of highway, distance from shore, depth below surface, fixed, floating</i>)</p>			
<p>53. GPS (Geographic Positioning System) coordinates (if available):</p>			
<p>54. Which of the following best describes this surface water source:</p> <ol style="list-style-type: none"> 1. <i>Primary (used year-round, or most of the year)</i> 2. <i>Secondary (used part of the year)</i> 3. <i>Back-up or Emergency</i> 			
<p>55. Is there a written watershed protection plan for this surface water source that considers drinking water?</p> <ol style="list-style-type: none"> 1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i> 			
<p>56. Do you know the approximate boundary of the contributing watershed (determined by the height of land or topographic boundary upstream of the intake) for this surface water source?</p> <ol style="list-style-type: none"> 1. <i>Yes</i> <i>If Yes, what is the approximate area of the watershed (in km²) _____</i> 2. <i>No</i> 3. <i>Unsure</i> 			

Note: If your watershed is designated under the Forest Practices Code, its boundaries may be located on the following website: http://www.env.gov.bc.ca/wsd/plan_protect_sustain/comm_watersheds/data.html For Spring Sources: The source area (the area that supplies water to the spring) for spring sources is not usually a simple topographic boundary. If this source is a spring and a detailed study has been conducted to determine the spring source area to a reasonable level of certainty, please indicate "Yes", otherwise indicate "No."

<i>Potential Contaminant Sources within 50 m of Intake</i>	Source __	Source __	Source __
<p>57. Look at the area within 50 m (160 ft) above the intake. Do you see or know of any of the following activities, or natural conditions, occurring in that area?</p> <p>Answer: Write number in the boxes below each well</p>	<p>1. Yes 2. No 3. Unsure</p>	<p>1. Yes 2. No 3. Unsure</p>	<p>1. Yes 2. No 3. Unsure</p>
a) <i>Accumulation of natural debris, algae or other material</i>			
b) <i>Major bank erosion or instability</i>			
c) <i>Pipeline, road, railway or hydro transmission line crossing stream, or close to stream</i>			
d) <i>Chemical storage (household or agricultural, including pesticides)</i>			
e) <i>Fuel storage (above ground or underground)</i>			
f) <i>Landfill, refuse storage or contaminated site</i>			
g) <i>Livestock</i>			
h) <i>Manure storage or application</i>			
i) <i>Municipal, industrial, or stormwater discharges, or agricultural drainage entering the source (stream, lake, reservoir) above the intake</i>			
j) <i>Recreation activities (legal or by trespass), including boat launch, float plane use, hunting.</i>			
k) <i>Septic systems, (including your own or those on nearby properties)</i>			
l) <i>Wildlife (deer, bear, beaver, ducks, geese, cougars, etc.)</i>			
m) <i>Other (specify)</i>			

<i>Potential Contaminant Sources in Contributing Watershed</i>	Source __	Source __	Source __
<p>58. Do you see or know of any of the following activities, or natural conditions, occurring within the contributing watershed (or equivalent source area for springs) upstream of the intake?</p> <p>Answer: Write number in the boxes below each well</p>	<p>1. Yes 2. No 3. Unsure</p>	<p>1. Yes 2. No 3. Unsure</p>	<p>1. Yes 2. No 3. Unsure</p>
a) <i>Commercial/industrial chemical storage</i>			
b) <i>Commercial/industrial fuel storage (above ground or underground)</i>			
c) <i>Forestry-related activities, including silviculture (tree planting)</i>			
d) <i>High density residential (i.e. subdivision) areas</i>			
e) <i>Intensive agriculture (e.g. commercial vegetable growing, nurseries, orchards, feed lots)</i>			
f) <i>Landfill, refuse storage or contaminated sites</i>			
g) <i>Livestock</i>			
h) <i>Major highway, railway, pipeline, hydro transmission lines</i>			
i) <i>Mining or oil/gas exploration and/or extraction</i>			
j) <i>Major municipal, commercial or industrial facilities or activities such as sewage treatment plant, refinery, factory, service station etc.</i>			
k) <i>Municipal, industrial, or stormwater discharges, or agricultural drainage entering the source (stream, lake, reservoir) above the intake</i>			
l) <i>Recreation activities (legal or by trespass)</i>			
m) <i>Wildlife (deer, bear, beaver, ducks, geese, cougars, etc.)</i>			
n) <i>Natural contaminant sources (landslides, exposed sediments, bogs)</i>			
o) <i>Other (specify)</i>			

<i>Source Water Quality</i>	Source __	Source __	Source __
<i>Physical/Chemical parameters: TOC, turbidity, pH, colour, nitrate, nitrite, metals, arsenic, fluoride, trihalomethanes (THM)</i>			
<i>Microbiological parameters total and fecal coliforms, heterotrophic plate counts, E. coli</i>			
<p>59. Has the surface water ever been tested at the source, before any treatment, for</p> <ol style="list-style-type: none"> 1. <i>Physical/Chemical parameters</i> 2. <i>Microbiological water quality</i> 3. <i>Both</i> 4. <i>None</i> 			
<p>60. Is the surface water tested regularly at the source, before any treatment?</p> <ol style="list-style-type: none"> 1. <i>Yes</i> <i>If yes, please specify (a) Physical/Chemical parameters, (b) Microbiological water quality or (c) both</i> 2. <i>No</i> 3. <i>Unsure</i> 			
<p>61. Who does the regular testing?</p> <ol style="list-style-type: none"> 1. <i>Water supply system owner or operator (supplier)</i> 2. <i>Health Authority (Environmental Health Officer)</i> 3. <i>Other (specify)</i> 			
<p>62. Have you ever had any source water quality test results exceed the maximum acceptable concentration as stated in the "Guidelines for Canadian Drinking Water Quality" that could impact health such as: fecal coliforms, E. coli, nitrate-nitrogen, arsenic, turbidity (DO NOT include aesthetic parameters such as iron, manganese, or hardness)</p> <ol style="list-style-type: none"> 1. <i>Yes</i> 2. <i>No</i> 3. <i>Unsure</i> 			

C. TREATMENT OF WATER SOURCE

63. If you have more than one source, are the sources combined prior to treatment?

1. Yes
2. No
3. Unsure

64. If you answered "no" to the previous question, is each source treated individually?

1. Yes
2. No
3. Unsure

65. If some sources are not treated, please list them by name:

Source Name(s) _____

<i>Source Treatment</i>	Source __	Source __	Source __
<p>66. Is the source water disinfected with chlorine?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Unsure 			
<p>67. Is the source water disinfected by an alternative method (not chlorine)?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Unsure 			
<p>68. Is the source water treated by filtration?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Unsure 			
<p>69. If the source water is treated by filtration, is it effective in removing disease-causing organisms (i.e., giardia, cryptosporidium) and their carriers (turbidity)?</p> <ol style="list-style-type: none"> 1. Yes (If yes) please describe 2. No 3. Unsure 			
<p>70. Is the source water treated by other methods to remove disease-causing organisms (i.e., giardia, cryptosporidium) and their carriers (turbidity)?</p> <ol style="list-style-type: none"> 1. Yes (If yes) please describe method 2. No 3. Unsure 			

<p>71. Is the source water treated for other reasons, such as iron or manganese removal, arsenic etc.?</p> <p>1. <i>Yes (If yes) please describe</i></p> <p>2. <i>No</i></p> <p>3. <i>Unsure</i></p>			
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72. Do you check, maintain and record treatment operations?

1. Yes (If yes) please describe (i.e. how often?) _____
2. No
3. Unsure

73. Do you have operating manuals for all equipment and operating instructions for all treatment processes?

1. Yes
2. No
3. Unsure

74. Please use this space to add comments relative to this section for further information or clarification.

D. WATER STORAGE

This section refers to facilities used for storing water prior to distribution to the customer. The term “finished water” refers to water ready for consumption.

75. Are there any tanks used to store finished water?

1. Yes
2. No (If no), please go to Section E. Distribution System
3. Unsure

76. Are the storage tanks covered?

1. Yes
2. No
3. Unsure

77. Are all openings, such as vent pipes, overflows and drains screened or valved to protect against the entrance of small animals, and pests?

1. Yes
2. No
3. Unsure

78. Do the storage tanks include design features that encourage adequate daily water turnover, water circulation and reduce stagnation and chlorine decay?

1. Yes
2. No
3. Unsure

79. Are finished water samples taken from the water storage tank?

1. Yes
2. No
3. Unsure

80. Are storage tanks cleaned periodically?

1. Yes (If yes) please describe (i.e. frequency) _____
2. No

3. *Unsure*

81. Please use this space to add comments relative to this section for further information or clarification.

E. DISTRIBUTION

82. Is there a distribution system flushing program in place?

1. Yes
2. No
3. Unsure

83. Do you have a routine leak detection and repair program?

1. Yes
2. No
3. Unsure

84. Are you aware of any areas in your distribution system where there is no measurable (less than 0.2 mg/L total or less than 0.1 mg/L free) chlorine residual?

1. Yes
2. No
3. Unsure
4. Do not use chlorine

85. Are routine operation and maintenance checks, such as exercising the valves, performed on the distribution system and recorded?

1. Yes
2. No
3. Unsure

Cross-Connection

Any actual or potential connection between the potable drinking water supply system and any source or system containing non-potable water or other substances. An example is the piping between a public water supply system or consumer's potable water system and an auxiliary water system, cooling system, or irrigation system

Cross connection control program may include a cross-connection control by-law, requirements for installation and testing of backflow prevention devices, establishment of a residential backflow protection program where an appropriate backflow device is installed at every new residence, survey of commercial and industrial facilities for potential cross-connections, public education.

86. Is there a written cross connection control program in place?

1. Yes
2. No
3. Unsure

87. Is there a cross-connection control by-law in your community or for your water supply system?

1. Yes (If yes) Is the by-law enforced? _____
2. No
3. Unsure

88. Please use this space to add comments relative to this section for further information or clarification.

F. TAP WATER QUALITY

89. Are you aware of any health risks that have been identified by the environmental health officer or other water quality professional for your water supply system?
1. Yes
 2. No
 3. Unsure
90. Is the tap water tested regularly for parameters that impact health (such as total and fecal coliforms, E. coli, nitrate-nitrogen, arsenic, turbidity NOT for aesthetic traits like iron, manganese, or hardness)?
1. Yes
 2. No
 3. Unsure
91. Who does the regular testing?
1. Water supply system owner or operator
 2. Health Authority (Environmental Health Officer)
 3. Other (specify) _____
92. Are you notified promptly about potential health risks after the water samples are tested?
1. Yes
 2. No
 3. Unsure
93. Who interprets the laboratory results to identify and advise you about potential health risks?
1. Water supply system owner or operator
 2. Health Authority (Environmental Health Officer)
 3. Water quality professional (lab staff, consultants)
 4. Other (specify) _____
94. Do you usually know what corrective action is required when you are notified of potential health risks?
1. Yes
 2. No
 3. Unsure
95. Have you ever had any water quality results exceed the maximum acceptable concentration as stated in the "Guidelines for Canadian Drinking Water Quality" that could impact health: fecal coliforms, E. coli, nitrate-nitrogen, arsenic, turbidity; NOT aesthetic traits like iron, manganese, or hardness?
1. Yes (If yes) please describe _____
 2. No
 3. Unsure
96. Have you ever had any water quality results where disinfection by-products, such as trihalomethanes (THMs) exceed the standard contained in the "Guidelines of Canadian Drinking Water Quality"?
1. Yes (If yes) please describe? _____
 2. No
 3. Unsure
97. Please use this space to add comments relative to this section for further information or clarification.

G. NEXT STEPS

I agree that the responses to the questions in the Screening Tool are true to the best of my knowledge.

Water Supply System Owner or Delegate

Date

I have read this completed Screening Tool and discussed the contents with the water supply system owner or delegate.

Drinking Water Officer

Date

Action Required	Date Assigned	Date By Which Action Must Be Complete