

NEW DRINKING WATER SOURCE GUIDELINE

1.0 INTRODUCTION

Health Protection staff engage in assessing and evaluating proposed new sources of drinking water to ensure they are properly located and verify possible sources of contamination or drinking water health hazards.

The guideline outlines evaluation information necessary to assess health risks, support source protection efforts, and facilitate proper system design. Surface and ground water source components include:

1.1 Surface Water Sources

- a) Watershed characterization (e.g. hydrology, water quality, trends).
- b) Contaminant survey results that identify hazards in a watershed and have the potential to impact water quality.
- c) Risk characterization including consequences to drinking water.
- d) Source protection measures to be considered or implemented.

1.2 Ground Water Sources

- a) Aquifer characterization (e.g. well site selection, aquifer vulnerability)
- b) Contaminant survey results that identify hazards that may impact well water quality.
- c) Risk characterization including consequences to drinking water.
- d) Identification of wellhead protection measures to be considered or implemented.

2.0 PROCESS

***Note: An Application for New Drinking Water Source must be submitted to the local Environmental Health Officer prior to submitting an Application for Waterworks Construction Permit to Public Health Engineering.**

2.1 The applicant on behalf of a water supply system proposing a new drinking water source provides the following to the local Environmental Health Officer (EHO):

- a) A completed 820249 Application for New Drinking Water Source including:
 - Water system name, legal owner, address, phone number
 - location, nature and type of proposed source
 - water quality analyses results, assessment of a ground water source requires (2) steps

- (i) *Siting the Test Well for drilling*
- (ii) *Testing the well for Water Quality. Sample results from the Test Well are to be sent to the DWO for review and comment*

- b) Results from a site inspection and contaminant survey. For guidance regarding the evaluation of proposed surface or groundwater sources please refer to HP-WQ-9015 Evaluation Criteria for Surface Water or HP-WQ-9016 Evaluation Criteria for Ground Water respectively.

2.2 The Environmental Health Officer is responsible for the following:

- a) When a completed 820249 Application for New Drinking Water Source is received the EHO initiates the review and evaluation process.
- b) Originals of the application and supporting information are kept by the Environmental Health Officer. Copies of information are provided to appropriate staff as required. Examples are the Drinking Water Specialist, Team Leader, and Source Protection Officer.
- c) As part of the source assessment process, evaluate the appropriateness of the proposed water source by :
 - Carrying out a site inspection of the proposed source prior to the construction of any works (i.e. intake or well).
 - Reviewing a water quality analyses with reference to the *Drinking Water Protection Act (DWPA)*, *Guidelines for Canadian Drinking Water Quality (GCDWQ)*, and *Ministry of Environment Source Water Quality Guidelines*.
 - Consulting with members of the Drinking Water Team (e.g. Public Health Engineer, Medical Health Officer, Drinking Water Specialist, and Source Protection Officer) as required.
- d) Upon completion of the evaluation process the Environmental Health Officer will forward site inspection results and water quality evaluation to the water system applicant (a copy is provided to the Public Health Engineer). They will indicate whether the proposed source is appropriate to be considered for use as a drinking water source (i.e. can or can not be used), whether treatment is required, and identify any other concerns they may have regarding the proposed drinking water source.