EVALUATION CRITERIA FOR NEW DRINKING WATER GROUND WATER SOURCES GUIDELINE

1.0 INTRODUCTION

The intent of the source assessment process is to provide the information necessary to evaluate potential health risks, support source protection planning, and facilitate proper system design. The information provided should include the following elements:

1. Source assessment (e.g. well site selection)
2. Identification of potential sources of contamination that may impact water quality
3. Identification of wellhead protection measures to be considered or implemented.

2.0 INVESTIGATION CRITERIA

The depth of investigation and amount of information required to support system design will vary for each situation.

a) Water systems proposing to service >500 persons should typically be expected to complete an assessment equivalent to that described in modules 1, 2, & 7 of the BC *Comprehensive Source-to-Tap Assessment Guideline* (see references).

b) Small water systems (i.e. those serving <500 persons) should at a minimum provide an assessment equivalent to that described in the BC Drinking Water Source-to-Tap Screening Tool (see references)

c) Considerations:

The following items may be considered during the site assessment of a proposed groundwater drinking water source. This list is not exhaustive, but is intended to stimulate thought:

Does the water supplier own the land that the proposed well will be located on?	☐ Yes	☐ No			
Is the aquifer in the general area considered confined and not vulnerable to contamination? (MOE website-Wells, Aquifer Vulnerability maps)	☐ Yes	☐ No			
Does the proposed well location have the potential to be GUDI/GWUDI?	☐ Yes	☐ No			
Are there any contaminated sites in proximity to the proposed well location? (MOE contaminated sites registry)	☐ Yes	☐ No			
Is any of the following occurring within the capture zone or within 100m of the proposed well?					
Cattle Grazing	☐ Yes	☐ No	Agriculture	☐ Yes	☐ No
Fertilizer Use	☐ Yes	☐ No	Industrial	☐ Yes	☐ No
Fuel storage	☐ Yes	☐ No	Landfills	☐ Yes	☐ No
Manure Stockpiles	☐ Yes	☐ No	Transportation	☐ Yes	☐ No
Salt storage	☐ Yes	☐ No			

Are there any sewerage disposal systems within 30 metres?	☐ Yes	☐ No
Are there any Municipal Sewage Regulation disposal systems within 90 metres?	☐ Yes	☐ No
Are there any cemeteries within 120 metres?	☐ Yes	☐ No
Is the area low lying or potentially subject to flooding (i.e. within the 20 year flood level)?	☐ Yes	☐ No

3.0 REFERENCE DOCUMENTS

No one process for assessing ground water will be appropriate for all systems. However, the following provincial documents provide some guidance regarding the collection of information to support water system design:

a) BC *Drinking Water Source-to-Tap Screening Tool* (Section B1) (www.health.gov.bc.ca/protect/source.html#water2)

b) BC *Comprehensive Source-to-Tap Assessment Guideline* (Modules 1, 2, & 7) (www.bcwwa.org/source-to-tap/index.php)

c) BC *Well Protection Toolkit* (www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/wells/well_protection/wellprotect.html)

More extensive lists of hazards and elements to be considered can be found in the:

d) BC *Well Protection Toolkit (Appendix 3.1)*,

e) *Guidance Document for Determining Ground Water at Risk of Pathogens and Ground Water Under Direct Influence of Surface Water* (Province of BC Draft Document),

f) CCME's *From Source to Tap: Guidance on the Multi-barrier Approach to Safe Drinking Water* (www.ccme.ca/publications/list_publications.html),

g) USEPA Source Water Protection website (http://cfpub.epa.gov/safewater/sourcewater/):