

B.C. MINISTRY OF TRANSPORTATION

SA07 - Local Area Specification #6

WATER TESTING

1. OBJECTIVE

To ensure a safe drinking water supply.

2. GENERAL PERFORMANCE SPECIFICATIONS

2.1 Routine Maintenance Services

All services for this Local Area Specification are Routine.

2.2 Quantified Maintenance Services

Not applicable to this Local Area Specification.

3. DETAILED PERFORMANCE SPECIFICATIONS

3.1 Routine Maintenance Services

The Contractor must:

- a) collect water samples at the following locations:
 - i) Bradner Rest Area;
 - ii) Bradner sani station;
 - iii) Hunter Creek Rest Area;
 - iv) Johnson Slough Rest Area;

- b) collect water samples in accordance with the Fraser Health Authority sampling instructions (Appendix 1 to this Local Area Specification) and Schedule B of the *Drinking Water Protection Regulations*; the *Drinking Water Protection Regulations* are available at the following site:

www.qp.gov.bc.ca/statreg/reg/D/200_2003.htm

- c) deliver the water samples to the following locations:
 - i) samples taken at Bradner (Rest Area and sani station) to the Abbotsford Health Unit, #207 – 2776 Bourquin Crescent West, Abbotsford;
 - ii) samples taken at Hunter Creek to the Hope Health Unit, 444 Park Street, Hope;
 - iii) samples taken at Johnson Slough to the Agassiz Health Unit, 7243 Pioneer Avenue, Agassiz
- d) perform routine flushing of the water systems;
- e) maintain the pump, well and water systems;
- f) ensure water quality tests for physical and chemical parameters are performed by an accredited lab and results forwarded to the Environmental Health Officer in accordance with the timeframes outlined in section 3.1.1;
- g) report issues regarding water quality to the Environmental Health Officer;

3.1.1 Performance Time Frames

The Contractor must;

- a) collect and deliver water samples weekly in accordance with the following:
 - i) Bradner: by Tuesday, 3:00pm;
 - ii) Hunter Creek: by Tuesday 2:00pm
 - iii) Johnson Slough: by Wednesday 2:00pm;
- Note: If the Contractor is unable to submit samples by this time, samples must be sent to an approved private lab, at the Contractor's expense, and results forwarded to the Fraser Health Authority;
- b) perform routine flushing of the water systems at least twice annually, once in the spring and once in the fall; and, if testing results indicate an unsatisfactory level of contaminants, the Contractor will flush the systems immediately;
 - c) report issues regarding water quality immediately;

- d) test water for physical and chemical parameters within 30 days of contract commencement date; and every 3 years thereafter;

3.2 Quantified Maintenance Services

Not applicable to this Local Area Specification

3.2.1 Performance Time Frames

Not applicable to this Local Area Specification.

3.3 Materials

The Contractor must use only the sterile bottles provided by the lab. Refer to Section B of the Introduction to the Maintenance Specifications for other materials.

4. WARRANTY

Not applicable to this Local Area Specification.

APPENDIX 1
SA07 - LOCAL AREA SPECIFICATION #7
WATER TESTING

Instruction for Collecting Water for Bacteriological Analysis

Water samples must be collected on the same day that they are being submitted to the Health nit. Water samples that take longer than 30 hours to get to the Laboratory will NOT be tested.

1. Label sample bottle

Use only the sterile bottles provided by the lab specifically for chloriform sampling. Label bottle with:

- Water system name
- Location of water sample, and
- Date and time of sample collection.

Example water bottle label:

<p><u>TREATED</u></p> <p><u>WATER BACTERIOLOGY</u></p> <p><u>(BOTTLE CONTAINS DECHLORINATING AGENT)</u></p> <p><u>Source: John's Water System, 1234 Ross Lake Road</u></p> <p><u>December 10, 2002 (10:00AM)</u></p> <p><u>Sent by Fraser Health Authority</u></p> <p><u>Laboratory Provincial</u></p> <p><u>B.C. Centre for Disease Control</u></p>

2. Complete water requisition form with:

- Date and Time of sample collection
- Name of Person who collected the sample

3. Sampling procedures:

- (i) Collect water samples from identified sampling locations;
- (ii) Do not rinse the bottles. Sample bottles contain a small amount of sodium thiosulphate to neutralize chlorine residual present in chlorinated water;
- (iii) Make sure the tap has no aerator, swivel or hose attached. Disinfect the tap with an alcohol wipe or strong chlorine solution prior to collecting the sample;
- (iv) Run the tap for a minimum of 2 to 5 minutes;
- (v) Remove the cap from the sterile bottle and fill just above the fill line;
- (vi) Do not touch inside of the bottle or cap or otherwise allow the cap to become contaminated while the bottle is being filled;
- (vii) Replace the cap;
- (viii) Place the completed requisition form inside the ziplock bag and attach the ziplock bag to the bottle with an elastic band.

4. Record free available chlorine residuals

For chlorinated water samples measure and record the Free Chlorine Residual on the requisition.

5. Shipping

Place the water sample into a cooler with ice packs and transport to the Health Unit as soon as possible after collection of the sample.

NOTE: Water samples must be correctly labelled to be tested by the Provincial Laboratory