The following clinical practice has been approved for use in the Northwest Territories Health and Social Services system, and has been distributed to:

- [x] Hospitals
- [x] Community Health Centers
- [x] Public Health Units
- [ ] Doctors’ Offices
- [ ] Social Services Offices
- [x] Other: Community Governments

The information contained in this document is a Departmental:

- [x] Standard
- [ ] Protocol
- [ ] Procedure
- [ ] Guidelines
- [x] Directive

**Title:** Summary Table - Northwest Territories Drinking Water Sampling and Testing Requirements

**Effective Date:** April 19, 2007

**Statement of approved clinical practice:**

The attached revised Summary Table provides direction from the Chief Medical Health Officer, as the regulator of drinking water safety in the Northwest Territories, for minimum Drinking Water Sampling and Testing Requirements. With this update raw water samples are now required in addition to treated water samples. Every community is required to sample and test for those parameters outlined in the Summary Table. In addition, community records must be kept of test results, and a copy sent to the Regional Environmental Health Officer on an ongoing basis. Any sampling results that may impact the safety of the drinking water supply and/or public health must be reported to the Environmental Health Officer immediately.

These sampling requirements are based on the NWT Public Water Supply Regulations, made under the Public Health Act and the Guidelines for Canadian Drinking Water Quality.

**The attached Summary Table (dated April 19, 2007) supersedes all previous directives for minimum Drinking Water Sampling and Testing Requirements.**

**Attachment:** Summary Table – Northwest Territories Drinking Water Sampling and Testing Requirements.

This clinical practice is approved.  

(signature)

Assistant Deputy Minister  [ ]  Chief Medical Officer of Health  [x]  Director, Child & Family Services  [ ]  Director, Adoptions  [ ]
## Summary Table – NWT Drinking Water Sampling and Testing Requirements

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Raw Water</th>
<th>Treated Water</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A) Bacteriological</strong></td>
<td>E. coli and total coliforms (presence / absence test)</td>
<td><strong>Piped Water Distribution</strong> - Minimum four samples per month and one additional sample per month for every 1,000 population over 4,000. At least one sample taken immediately after treatment with the remaining samples taken from different locations in the distribution system. Samples should be taken every week. <strong>Trucked Water Distribution</strong> - At least one sample must be taken from each water truck in use that month, with the remaining samples taken from different public buildings.</td>
</tr>
<tr>
<td>One sample per month.</td>
<td></td>
<td>Pixels</td>
</tr>
<tr>
<td><strong>B) Chlorine</strong></td>
<td>Not applicable.</td>
<td>Plants with treated water storage must maintain a free chlorine residual of at least 0.2 mg/L after 20 minutes. Plants without water storage must maintain a free chlorine residual of at least 0.4 mg/L after 20 minutes. Keep records of test results.</td>
</tr>
<tr>
<td><strong>C) Turbidity</strong></td>
<td>One sample per day, upstream of the water treatment process.</td>
<td>Where practical, online continuous monitoring downstream of the treatment process is required. Where online monitoring is not practical, grab samples may be taken; one sample per delivery day plus one additional sample every four hours of plant operation. Keep records of test results.</td>
</tr>
<tr>
<td><strong>D) Trihalomethanes (THMs)</strong></td>
<td></td>
<td>Quarterly samples are required with a minimum of four per year.</td>
</tr>
<tr>
<td>Not applicable.</td>
<td></td>
<td>Pixels</td>
</tr>
<tr>
<td><strong>E) Chemical and Physical Parameters</strong></td>
<td>If disinfection, i.e. chlorination/ UV light, is the only water treatment process, then raw water samples are not required. Otherwise, one sample per year of the 28 parameters listed below is required.</td>
<td>One sample per year is required for each of the 28 parameters listed below.</td>
</tr>
</tbody>
</table>

1. Alkalinity
2. Aluminum
3. Arsenic
4. Barium
5. Cadmium
6. Chloride
7. Chromium
8. Colour
9. Copper
10. Cyanide
11. Fluoride
12. Iron
13. Nitrate
14. Lead
15. Manganese
16. Mercury
17. pH
18. Selenium
19. Sodium
20. Sulphate
21. Total Hardness
22. TDS (Total Dissolved Solids)
23. TOC (Total Organic Carbon)
24. DOC (Dissolved Organic Carbon)
25. TSS (Total Suspended Solids)
26. Turbidity
27. Uranium
28. Zinc

The Chief Medical Health Officer:
- (a) as a Medical health Officer, and under authority of section 9 of the Public Water Supply Regulations, R.R.N.W.T. 1990, c.P-23, and
- (b) under authority of sections 11, 12, and 16 of the Public Water Supply Regulations, R.R.N.W.T. 1990, c.P-23, directs operators or owners of public drinking water systems in the Northwest Territories to conduct and perform sampling and testing of public drinking water in accordance with the above Summary Table.

André Corriveau, MD, MBA, FRCPC
Chief Medical Health Officer

Date: 19/04/07

For inquiries or assistance with sampling call:

**Environmental Health Services**

- **Yellowknife**  (867) 669-8979
- **Hay River**   (867) 874-3080
- **Inuvik**      (867) 777-7250/7220

April 19, 2007