

Drinking Water Treatment for Surface Supplies – 4321 Objectives

Presentation to Association of Vancouver Island and Coast Communities

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Overview



- ◆ Why 4321
- ◆ Potable water
- ◆ 4321 treatment objectives
- ◆ Implementation

Why 4321

- ◆ Address the concern for emerging pathogens
- ◆ Improve existing systems by adding additional barriers to reduce risk
- ◆ Catch up with the rest of the developed countries and the rest of Canada
- ◆ New water systems in VIHA with surface water have been required to meet 4-3-2-1 since 1997.



**Potable Water
BC Drinking Water Protection Act**

- ◆ Water supply systems must provide potable water
- ◆ Surface water must be disinfected
- ◆ Water must be safe to drink without further treatment



4321 Treatment Objectives

- 4 - log removal/inactivation of viruses
- 3 - log removal/inactivation of Giardia cysts and Cryptosporidium oocysts
- 2 - processes of operation (filtration & disinfection or two disinfectants)
- 1 – NTU turbidity in finished water



 **Implementation**

- ◆ Policy applies to systems serving more than 500 person/day – approx 22 systems
- ◆ Water suppliers developed a plan to meet 4-3-2-1
- ◆ Operating permit amended to reflect the plan and treatment requirements
- ◆ Time required to comply depends on the individual system and degree of improvements needed

 **Questions and Discussion**

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