



Interior Health

August 31, 2012

Chief Administrative Officer
Village of Ashcroft
PO Box 129, 601 Bancroft Street
Ashcroft, BC V0K 1A0

Dear Michelle Allen

**Re: Village of Ashcroft
Drinking Water Quality Improvement Program – 2012 Proposed Conditions of Permit**

Since the enactment of the Drinking Water Protection Act (DWPA) & Drinking Water Protection Regulation (DWPR) Interior Health has been working with the Village of Ashcroft towards better protecting its water supply system from source to tap. As part of this effort the Drinking Water Quality Improvement Program was implemented with focuses on a multi-barrier approach. Part of this program involves a regular re-evaluation of the Conditions of Permit on the water system.

The following terms and conditions on your Permit to Operate are placed under Section 8 of the Drinking Water Protection Act. As such, there is a legal requirement to comply with all terms and conditions of the permit. It is important to note that any amendment of an operating permit must occur in accordance with section 8 (4) of the Act, which requires prior consultation with the water supplier and consideration of any comments the water supplier may provide in respect of the proposed changes. The terms and conditions in this letter will supersede and update previous terms and conditions:

1. Provide Source Water Protection Plan for the Thompson River Source

The purpose of the source protection plan is to identify areas and activities that could affect the quality, quantity and timing of flow of the drinking water sources. By identifying critical areas and activities, the water supplier can influence planning and measure impacts on their system. Additionally, the source protection plan is to reduce threats to water quality and provide an additional barrier for drinking water protection. *DWP Act Section 18 (2) (a).*

Status:

- Thompson River Source Protection Plan – Village has not proceeded to date on a Source Protection Plan.

Objective:

- To considered risk from two perspectives: identifying the hazards that threaten drinking water, and identifying the vulnerabilities in the multiple barrier system intended to protect the drinking water system.
- Establish Assessment Team and complete Source Water Assessment in consultation with the Drinking Water Officer and Source Protection Officer.
- Focus on Modules 1, 2, 7 and 8 of the BC Comprehensive Drinking Water Source to Tap Assessment Guide or equivalent. <http://www.health.gov.bc.ca/protect/source.html>
- The completed Source Water Assessment will provide the basis for the development of the Assessment Response Plan/Risk Management Plan

Targets & Dates:

- Village to start with the Drinking Water Source to Tap Screening Tool Assessment prior to December 2012 http://www.health.gov.bc.ca/protect/pdf/BC_Drinking_Water_Screening_Tool.pdf
- Once screening tool is complete schedule initial source water assessment meeting with the Drinking Water Officer and Source Protection Officer and water suppliers consultant to establish the scope of assessment prior to issuance of an Assessment Terms of Reference February 2013.
- Engage the Assessment Team with Modules 1 & 2 to review the characterization and delineation of the source water and conduct the contaminant survey prior to August 2013.

- Engage the Assessment Team with Modules 7 & 8 to characterize the risks and the recommend actions to improve drinking water protection prior to August 2014.
- Develop and maintain a Assessment Response Plan/Risk Management Plan from the recommendations by August 2015.

2. Provide a Certified Operator to Operate the System

Provide the required Certified Operators to the level of Environmental Operators Certification Program (EOCP) classification in Water Treatment and Distribution. If the level of Certified Operators is currently above the existing certifications then please provide a reasonable timeline for staff to become certified to the required classification level.

Status:

- In Compliance with certified operators
- EOCP Classification – February 16, 2005 Water Distribution II

Objective:

- Continuously provide operator certified to treatment & distribution system classification levels.

Targets & Dates:

- Village of Ashcroft to maintain certified operators.
- If the classification level changes then develop a training plan for staff to achieve the required certification level. Plan would be based on a reasonable time frame in consideration of the EOCP educational courses (CEU's) and hours requirement.

3. Operate According to your Water Quality Monitoring Program

Develop and maintain a sampling, monitoring and recording program which encompasses both the treatment and distribution sides of the system (untreated and treated water) *DWP Act Section 11 & DWP Reg. Section 8 & Schedule A & B.* The program is to include as a minimum:

- Bacteriological and chemical monitoring representative of the treatment plant and overall distribution system. The sampling frequency must comply with the minimum frequencies set in Schedule B of the Drinking Water Protection Regulation.
- Continuous monitoring of the water disinfection process.
- Continuous turbidity monitoring.

Status:

- In Compliance

Objective:

- Provide an annual update of Village of Ashcroft Drinking Water Quality Monitoring Program with established schedules for systematic routine sampling.

Targets & Dates:

- Continue to collect the appropriate data for assessment and design of future treatment works to meet the Drinking Water Treatment Objective (43210) for Surface Water Supplies in British Columbia.
- Provide program update in the public Annual Report due by June 30th each year.

4. Operate According to your Cross Connection Control Program

If a water system is not protected against backflow from a cross connection, this becomes a potential source of contamination and therefore a significant health hazard. Water suppliers can protect against cross connections through a Cross Connection Control Program (CCCP), which will compliment other barriers of the multi-barrier approach to providing safe drinking water.

The purpose is to develop a phased approach of a detailed CCCP in accordance with Section 15 of the Drinking Water Protection Regulation. Phase one is to develop a cross connection control plan. The plan must include implementation dates, indicating when the various "milestones" of the overall program can be met (i.e. bylaw development, education of users, installation of backflow prevention devices, routine inspections, enforcement tools, etc.). *DWP Act section 22(3) & DWP Reg Section 15.*

Status:

- Currently in non-compliance.

Objective:

- Apply and maintain Industry Standards of Practices in Cross Connection Control.
- Protect the integrity of the water supply system.
- Reduce liability.
- Reduce risk of waterborne illness and the number of water quality complaints.
- Increase public confidence, awareness & education about cross connection control.

Targets & Dates:

- Village of Ashcroft to develop and provide Interior Health with Cross Connection Control Implementation Plan indicating milestones and dates which the program will accomplished. (i.e. Cross Connection Control Bylaw, facility risk assessment survey including percentage of total ACII (Agricultural, Commercial, Industrial, Institutional), Village facilities in compliance, Monitoring program for installation and testing of devices, high risk industry/facilities in compliance, public education initiatives etc.) by May 2013.
- Provide an annual update indicating successes and challenges of the Cross Connection Control Implementation Plan within the water systems Annual Report.

5. Provide a Turbidity Monitoring Program – Including Continuous On-line Turbidity Monitoring

Status:

- Complete and in compliance

Objective:

- Provide SCADA summary data in Annual Report

Targets & Dates:

- On-going, provide monitoring results in the monthly reports

6. Provide Continuous On-line Monitoring of the Water Disinfection Process

Status:

- Complete and in compliance

Objective:

- Provide SCADA summary data in Annual Report

Targets & Dates:

- On-going, provide monitoring results in the monthly reports

7. Provide Long-term Plans for Source Protection, Treatment and Distribution System Improvements considering the Drinking Water Treatment Objective (43210) for Surface Water Supplies in British Columbia, Drinking Water Protection Act & Regulation and the Guidelines for Canadian Drinking Water Quality

To provide a plan for the future and consider the financial, technical and water quality objectives for sustainable water infrastructure. Long term business and financial plans must reflect sustainability of the water supply system to provide safe, clean, reliable tap water for all users of the system.

Status:

- Non Compliance with the Drinking Water Treatment Objective (43210) for Surface Water Supplies in British Columbia
- The Thompson River Intake Treatment Facility only applies one barrier of protection with chlorination. The Thompson River source is subject to seasonal fluctuations in raw water quality that seem to coincide with freshet and have triggered public advisories due to turbidity.
- Currently on a Water Quality Advisory

Objective:

- Develop a Water Master Plan to address source protection, treatment and infrastructure improvements and long term operation and maintenance of the water supply system
- Focus on the primary treatment objectives to meet the Drinking Water Treatment Objective (43210) for Surface Water Supplies in British Columbia.

- Collect and compile source water data and consider the treatment options to meet the required treatment objectives
- Select and confirm the desired treatment option to address identified deficiencies with the source water. Develop a capital works and financial plan including timelines for completion of the necessary improvements to the water supply system.

Targets & Dates:

- Develop a Water Master Plan by June 2013. Review of the December 2003 Urban Systems report on the "River Infiltration Gallery Improvements" may provide some background to assist in the development of the Water Master Plan
- Provide a capital and financial plan outlining long-term system improvements as indicated in the Water Master Plan by October 2013.

8. Review and Update the Emergency Response Plan Annually

Develop and maintain a detailed emergency response & contingency plan, which is to be reviewed and updated by June 30th each year and provide the water supply system users access to an overview of the plan yearly by June 30th. Please provide an updated copy to Interior Health yearly. *DWP Reg. Section 13; DWP Act Sections 10 & 15.*

Status:

- Currently in Non-Compliance

Objective:

- To provide Emergency Response Plan that includes adequate provisions for public notification and appropriate corrective measures to respond to all emergency situations:
 - ❖ Detail response to disasters (i.e. loss of source water)
 - ❖ Detail security measures to address acts of vandalism or terrorism
- To Include an Emergency Response Plan to address public notification and appropriate corrective measures in response to deviations from defined and acceptable operating parameters:
 - ❖ High turbidity events
 - ❖ Low disinfection residual events
 - ❖ Positive bacteriological sampling results

Targets & Dates:

- Provide an updated Emergency Response Plan by Oct 31, 2012. Then provide an updated version annually prior to June 30th.

9. Monthly & Annual Water System Reports

Monthly Report

Status:

- Current in Non-Compliance - No reports being submitted monthly.

Objective:

Monthly reports for the treatment facility and the distribution system are to be submitted to Interior Health; the monthly reports are to include as a minimum the following:

- Daily water consumption
- Microbiological test results
- Continuous chlorine residuals from SCADA
- Continuous turbidity results from SCADA
- Records of customer complaints and response
- A synopsis of the operation and major maintenance activities that could affect or produce abnormalities in water quality in the area of the work being conducted both at treatment locations and throughout the distribution system (i.e. main repairs, reservoir cleaning, distribution flushing activities indicated by zones, etc.)

Targets & Dates:

- Submit monthly reports for 2012
- Ongoing Monthly Reporting.

Annual Report

The report is to be made available to the public/users by no later than June 30th of the following year (*DWP Act Section 15 & DWP Reg Section 11*). A copy is to be provided to Interior Health by June 30th annually. An annual report on the status of the Village of Ashcroft Water System will include such sections as:

- Overview of the Water Quality Monitoring Program including all measurable parameters including consumption and chemical sampling information
- Emergency Response Plan revised update
- Source Protection Plan update
- Capital Works Plan Completed and Proposed Works update
- Cross Connection Control Program update
- Operator Certification Program updates
- Operations updates

Status:

- Currently in Non-Compliance - No 2011 Annual Report submitted to date.

Objective:

- To provide consumer confidence and enhance communications regarding water quality, operations, monitoring results and capital works projects to the water supply system.

Targets & Dates:

- Annual Water System Report to be submitted by June 30th for the previous year.
- Annual Water System Report to be available on the Village of Ashcroft website.

Prior to placing formal conditions on the Village of Ashcroft Water System Operating Permit we would like to give you an opportunity to comment on the proposed Conditions of Permit. If you would like to meet to discuss the proposed conditions please contact me to arrange a meeting. It is expected that the revised Conditions of Permit will be in place by October 5, 2012. Thank you for your continuing cooperation and success in providing the Village of Ashcroft with Clean, Safe, Reliable tap water. I look forward to working with you over the coming year.

If you have any questions please call me directly at 250-851-7410.

Sincerely,



Rob Fleming CPHI(C)
Drinking Water Officer

cc: - Water Program – Health Protection, Interior Health