



# WATER FACILITY EVALUATION REPORT

## Health Protection

Premises Name <b>Brew Bay Improvement District Water System</b>		Tel: (604) 487-0960 Fax: (604) 487-1567	
Premises Address Brew Bay Powell River, BC		Inspection Date February 03, 2026	Time Spent 1 hour
Operator (Person in Charge) Brew Bay Improvement District			
<b>Inspection Type</b> Evaluation			

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

**Comments**  
**Drinking Water System Annual Evaluation Report**  
**Prepared by:** Michael Nguyen, Drinking Water Officer (DWO)  
**For:** Brew Bay Improvement District Water System  
**Operator:** Mel Waldron

**System Overview**  
 BBID receives water from a licensed surface water intake that diverts water from Lang Creek. Water is directed to two large horizontal stainless steel storage vessels. Two pumps draw water from the storage vessels into the pump house, where it passes through three Nextsand units, a bank of six PRO-30 UV lamps (currently offline), and a chlorine injector before entering a large pressure tank. Pressurized water then exits the pump house into the distribution system, which serves approximately 44 connections.

**Chemical Assessment**  
 The most recent full-spectrum water test, conducted in 2023, confirmed that all health-related chemical parameters meet the safe limits established by the **Guidelines for Canadian Drinking Water Quality (GCDWQ)**. However, turbidity remains a challenge due to the susceptibility of the source water to climatic events.  
**Note:** Full-spectrum water testing is required every five years. The next test is due in 2028.

**Bacteriological Assessment**  
 Bacteriological sampling in 2025 met the frequency requirements outlined in Schedule B of the **Drinking Water Protection Regulation**. Permit conditions mandate monthly bacteriological sampling, with a minimum of 4 distribution system samples per month. Details are provided in the attached sample range reports:

- **Distribution System Sampling Frequency:** 50 samples were collected from two sites, averaging approximately 4.2 samples per month.
- **Raw Water Sampling Frequency:** there were 6 raw bacteriological samples taken in 2025.
- **Total Coliform:** Detected in one samples (2%), both with a count of 13 CFU. Resampling showed clear results.
- **E. coli:** Not detected in any sample (0%).

These results meet the potability standards specified in Schedule A of the **Drinking Water Protection Regulation**.

**Summary of Issues and Activities**

- **System Overview:** The system operator demonstrates a thorough understanding of its operation and maintenance, collaborating effectively with Vancouver Coastal Health (VCH) and neighboring residents as issues or questions arise.
- **Treatment, Monitoring, and Maintenance:**
  - o Bacteriological sampling frequency is excellent.
  - o Turbidity (raw water), free chlorine (treated water), and flow rate are continuously monitored and recorded daily.
  - o **UV Treatment System:** The UV treatment system has been offline since 2023, preventing BBID from meeting the **4,3,2,<1,0 treatment objective** for surface water sources. UV treatment is essential to mitigate the high risk of Giardia and/or Cryptosporidium contamination.
  - o VCH imposed a long-term **Drinking Water Advisory (DWA)** in 2024. The advisory will remain in place until BBID resumes efforts to meet Canadian drinking water treatment objectives, including restoring the UV treatment system. Developing a timeline or action plan to bring UV treatment back online is highly recommended.
- **Drinking Water Advisory Communication:** Ensure that all water users are fully informed of the advisory, its implications, and the planned actions to address deficiencies.
- **Raw Water Sampling:** Introducing regular raw water sampling is advised to assess the source water's quality, especially given the system's reliance on surface water.
- **Storage Tank Maintenance:** The water storage infrastructure requires attention. Cribbing supporting the tanks is rotting, and one tank is leaking. Repairs or replacements should be prioritized to maintain system reliability and safety.

**Requirements**

**1. Good Sampling Practices**

- o Submit four bacteriological samples to VCH per month.

**2. Full Chemical Analysis**

- o Complete a full chemical analysis every five years.

**3. Communication with VCH DWO**

- o Keep the VCH DWO informed of any significant changes or issues related to system maintenance and water quality.
- o Provide updates on system improvement planning.

**4. Emergency Response Planning**

- o Review and update your Emergency Response Plan for 2026. A PDF Emergency Response Plan template has been provided with this inspection report. Ensure it is completed and submitted to VCH by June 2026.

**5. Annual Report**

- o The 2025 annual report for your water system users has not been submitted. Please ensure it is completed and submitted to VCH by June 2026. A water sample range report (PDF) summarizing all bacteriological tests conducted in 2024 has been provided with this inspection report.

**Updated Permit Conditions**

- **Bacteriological Sampling Frequency:** Submit a minimum of four samples from the distribution system and one from the source per month.
- **Chemical Analysis:** Complete a full-spectrum chemical analysis every five years.
- **Emergency Response Planning:** Review and update the Emergency Response Plan annually.
- **Annual Report to Water Users:** Prepare and publicly distribute the annual report within six months of the calendar year's end.

Your prompt attention to these matters is appreciated. For assistance or further clarification, please contact us.

**Action Taken**

- Information Exchanged

**Hazard Rating For Your Facility:**  High  Moderate  Low

DWO

DWO Printed Name  
**Michael Nguyen**