

## DRINKING WATER SYSTEM ANNUAL REPORT

**Reporting Period:** January 1<sup>st</sup> to December 31<sup>st</sup>, 2021 (year)

**Water System** Northside Firehall #1

**Water System Owner** qathet Regional District

**Primary Contact Name** (Operator or Manager) Regan Keil, Parks and Properties Supervisor

**Phone Number** (Operator or Manager) 604-485-2260 ext 408

**E-mail** (Operator or Manager) rkeil@qathet.ca

## DESCRIBE YOUR WATER SUPPLY SYSTEM

**What is the Source(s) of Raw Water?**

☒ Deep Well ☐ Shallow Well ☐ Surface Water ☐ Other

If other, specify details:

**Does the Drinking Water System have Primary Disinfection?**

☐ Yes ☒ No

☐ Chlorination ☐ Ultraviolet Light ☐ Ozone ☐ Other

If other, specify details:

**Does the Drinking Water System have Secondary Disinfection?**

☐ Yes ☒ No

☐ Chlorination ☐ Other

If other, specify details:

**Does the Drinking Water System have Filtration?**

☒ Yes ☐ No

Check all boxes that apply

☒ Cartridge Filter(s) ☐ Carbon Filter ☐ Sand Filtration ☐ Reverse Osmosis ☐ Other

If other, specify details:

## PUBLIC REPORTING

**Emergency Response & Contingency Plan (ERCP)**

**Is your ERCP up to Date?** ☒ Yes ☐ No

**How do you Inform the System Users of the ERCP?**

☐ Hand Delivered ☐ Bulletin Board ☐ Newspaper ☐ Utility Bill Insert ☒ Website

☐ Other (specify details)

**Drinking Water System Annual Report**

**How do you Inform the System Users of the Annual Report?**

☐ Hand Delivered ☐ Bulletin Board ☐ Newspaper ☐ Utility Bill Insert ☒ Website

☐ Other (specify details)

### COMPLIANCE WITH OPERATING PERMIT

**List the conditions of your Operating Permit (Contact the DWO for a copy if needed):**

Submit bacteriological samples on a minimum quarterly basis.

Complete the water system Emergency Response & Contingency Plan before June 03, 2013 and submit a copy to the DWO.

**Are you in compliance with your Operating Permit?**

☒ Yes

☐ No

### BACTERIOLOGICAL TESTING AND DRINKING WATER PROTECTION REGULATION WATER QUALITY STANDARDS

**How many bacteriological samples were collected during this reporting period?**

4

**What is the minimum required sampling frequency for this system? (#samples/month)**

Quarterly

Additional sampling details:

**Was the minimum required sampling frequency achieved?**

☒ Yes

☐ No

Comments:

**Bacteriological summary attached to this report?**

☒ Yes

☐ No

**If no, how do the users of the system view the results?**

### WATER QUALITY STANDARDS FOR POTABLE WATER

Parameter:	Standard:	Did this system meet standard?	
Escherichia coli (for all samples)	No detectable <i>Escherichia coli</i> per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if only 1 sample collected in a 30 day period)	No detectable total coliform bacteria per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if more than 1 sample collected in a 30 day period)	No more than 10% of samples contain total coliform bacteria, <b>and</b> No sample has more than 10 total coliform bacteria per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

**If the system did not meet any of above Drinking Water Protection Regulation standards, record the results in the table below; attach additional sheets if necessary.**

Date	TC/100ml	E.coli/100ml	Reason	Corrective Action

### CHEMICAL SAMPLING COMPLETED DURING THIS REPORTING PERIOD

**Was any chemical sampling conducted during reporting period?** ☐ Yes ☒ No

**If no, when were the last chemical samples conducted for this system?**

(date) 11/27/2012 ☐ Don't Know ☐ Never

**If yes, did all water samples meet the Guidelines for Canadian Drinking Water Quality?**

☒ Yes ☐ No

**If any water samples did not meet the Guidelines for Canadian Drinking Water Quality, record the results in the table below; attach additional sheets if necessary.**

Parameter	Result	Corrective Action / Treatment / Comments

### ADDITIONAL TESTING

**Does the system have analyzers for continuous monitoring?** ☐ Yes ☒ No

**If yes, check all boxes that apply:**

☐ Chlorine ☐ Turbidity ☐ Other (details)

**Are the results available on request?**

**If any additional testing or sampling was conducted, record results in the table below; attach additional sheets if necessary.**

Additional Testing & Reason for Sampling	Corrective Action Taken

### WATER QUALITY COMPLAINTS

**Were there any water quality complaints in this reporting period? (e.g. taste, odour, colour etc.)** ☐ Yes ☒ No

**If yes, complete the table below; attach additional sheets if necessary.**

Date	Water Quality Complaint	Corrective Action / Treatment

### OPERATIONAL PROBLEMS

**Were there any operational problems during this reporting period? (e.g. insufficient water supply, malfunction of disinfection equipment, line breaks, elevated turbidity etc.).**

☐ Yes

☒ No

**If yes, complete the table below; attach additional sheets if necessary.**

Incident Date	Type of Operational Problem	Corrective Action Taken

### MAJOR UPGRADES/REPAIRS & EXPENSES

**Were there any major upgrades/repairs or any major costs incurred during this reporting period?**

☐ Yes

☒ No

**If yes, complete the table below; attach additional sheets if necessary.**

Major Upgrades/Expenses	Details
Improvements required by DWO	
Additions/changes to system	
Purchase or install new equipment	
Equipment repair or replacement	
Annual maintenance of system	
Specialist report	
Other	

### FUTURE IMPROVEMENTS

**Are there any plans for future improvements?**

☐ Yes

☒ No

**If yes, complete the table below; attach additional sheets if necessary.**

Future Upgrades or Improvements	Estimated Date of Completion

**Click here to enter a date.**

**DATE COMPLETED:** April 22, 2022

**COMPLETED BY:** Regan Keil

# NVFD - POWELL RIVER COMMUNITY HEALTH

DATE COLLECTED YEAR    DATE	INSIDE TAP					
	TC*	FC**	CMT	TC*	FC**	CMT
<b>2021</b>						
20-Apr	L1	L1				
28-Sep	L1	L1				
7-Dec	L1	L1				

EST: EST result indicates high colony density on membrane preventing accurate coliform counting.

BWA: Boil Water Advisory

OG: Overgrown - confluent bacterial growth on membrane preventing accurate coliform determination

~ More than 200 background colonies noted on total coliform  
membrane filter per 100 ml. Indicates system requires flushing

# Indicates high colony density on membrane preventing accurate coliform counting

\* Total Coliform per 100 mL

\*\* E. Coli per 100 mL

CMT Comment

L Less than

## **Small Water System Emergency Response Plan**

**Name of Water System: NVFD #1**

**Date Prepared:** March 10, 2022 **Prepared By:** Caroline Visser

### **Emergency Contact Information**

<b>Contact Name(s)</b>	<b>Phone #</b>	<b>Cell #</b>	<b>Fax # or other #'s</b>	<b>Email</b>
<b>Operator</b> If certified operator give EOC #: Regan Keil - #9197	604-487-1380	604-223-7856		<a href="mailto:rkeil@qathet.ca">rkeil@qathet.ca</a>
<b>Owner's Name and Address:</b> qathet Regional District 202 – 4675 Marine Ave. Powell River, BC V8A 2L2	604-487-1380	604-483-8201		<a href="mailto:operations@qathet.ca">operations@qathet.ca</a>
<b>Electrician:</b> Foxtrot Electrical Solutions	604-414-3929			
<b>Plumber:</b> Target Plumbing	604-483-5192	604-414-8450		
<b>Equipment Supplier(s):</b> Pete's Plumbing Fred Surridge	604-485-9761 250-954-0368			
<b>Other:</b> Jim Brown, Chief	604-483-9303	604-483-1371		
<b>Public Health Contact Information</b>				
<b>Drinking Water Officer:</b> Michael Nguyen, DWO	604-485-3324	604-414-5545	778-317-8567	<a href="mailto:Michael.nguyen@vch.ca">Michael.nguyen@vch.ca</a>
<b>Back-up Health Contact</b> Darren Molder, SEHO	604-885-8711	604-989-1357	604-885-5200	<a href="mailto:Darren.molder@vch.ca">Darren.molder@vch.ca</a>
<b>Back-up Health Contact</b> Jack Davidson, EHO	604-485-3335	604-483-1981	604-314-0596	<a href="mailto:Jack.Davidson@vch.ca">Jack.Davidson@vch.ca</a>
<b>Medical Health Officer:</b> Dr. Geoff McKee, MHO	604-983-6701	604-842-2357	604-983-6715	<a href="mailto:geoff.mckee@vch.ca">geoff.mckee@vch.ca</a>
<b>Back-up Health Contact</b> Mark Ritson, DWO, Manager Health Protection	604-983-6751	604-219-7359	604-988-6516	<a href="mailto:Mark.ritson@vch.ca">Mark.ritson@vch.ca</a>

### Location of Water Source(s)

Directions to Site: 20km N of Powell River on Plummer Creek Road of Craig Road.

Attach photos: see next page

GPS settings: 49° 56' 55.99" N 124° 40' 50.8" W

### IN CASE OF EMERGENCY: *Enter name of the person responsible for tasks.*

If the water in the water system becomes contaminated or you receive an unsatisfactory water result, or in the event of an interruption in the treatment process:

1. Shut off water supply, if appropriate.
2. **Regan Keil** will notify DWO or back-up health contact.
3. Contact other appropriate person(s) from the list of emergency numbers.
4. **Regan Keil** will notify any affected water users. Please keep a phone and address list of users and warning signs handy. May need to phone or hand-deliver the notice (and water disinfection procedures) to the users.
5. **Regan Keil** will post warning signs.
6. **Regan Keil** will coordinate repair.
7. Organize alternate source of safe drinking water (if available).

### Start-up Procedure

1. Identify and correct source of contamination.
2. Entire system should be flushed and disinfected. Follow attached guideline.
3. Submit water sample(s) to appropriate approved Lab for testing. For bacteriological contamination three negative successive samples are usually required. Contact your DWO to confirm the number of samples necessary.
4. Contact DWO for approval to resume use of water supply.

### Posting the Emergency Response Plan

**The ERP must be posted in a conspicuous location that is easily accessible to the operator and management of the water supply.**

Location of ERP: Upstairs of fire hall by kitchen sink with a copy at the qathet Regional District Maintenance Facility.

### Additional Information

1. **Include a schematic drawing of the water supply system; from the source to the tap. Include all sources, storage, reservoirs, treatment and distribution system.**
2. **Include public notices which may be required in the event of a "boil advisory" or "do not consume" notice. Templates are attached.**

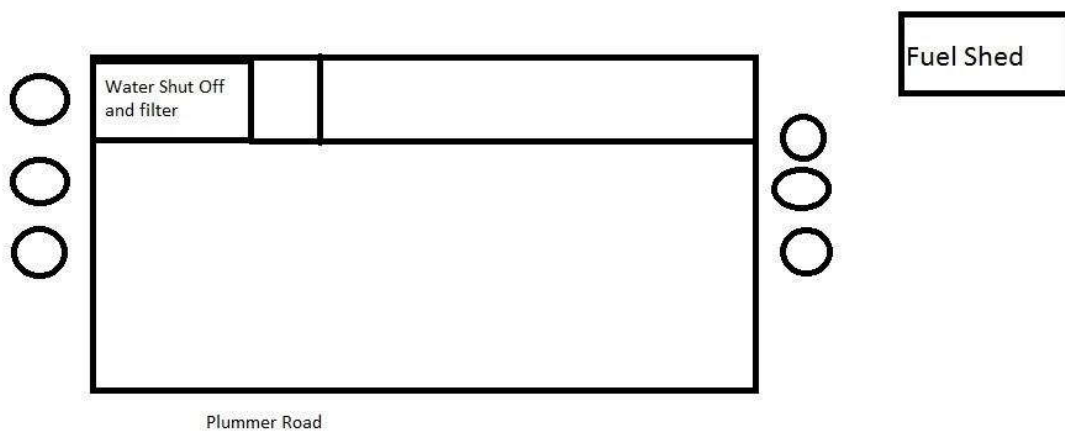
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○ Well

Northside Fire Hall





# **DO NOT USE WATER NOTICE**

**NVFD#1 WATER  
SYSTEM  
IS ADVISING ALL USERS  
THAT THE DOMESTIC  
WATER SUPPLY IS NOT  
SAFE FOR DRINKING OR  
DOMESTIC USE.**

**\*\*DUE TO THE NATURE OF THE  
CONTAMINATION, BOILING MAY NOT  
ACHIEVE SAFE DRINKING WATER**



# **BOIL WATER ADVISORY**

**NVFD#1 Water System is advising all users to boil their water before using it for drinking, cooking, washing food, or brushing teeth, due to a potential problem with the water system.**

**The water can be made safe by boiling it for one minute at a rolling boil. Boiled water should be stored in a clean container in the refrigerator.**

**Alternatively, bottled water can be used.**

**You will be notified when service is returned to normal and the water is again safe to drink. Thank you for your co-operation in this matter.**

