

DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, 2021 (year)

Water System Malaspina 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):

Ensure Emergency Response Plan is reviewed at least annually and updated as required.

Submit a bacteriological sample at least very 6 months.

Sample for Nitrates annually and forward sample results to 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) every 6 months

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, and 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) 02/18/2021 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: March 15, 2022

COMPLETED BY: Regan Keil

D - POWELL RIVER COMMUNITY HEA

DATE COLLECTED YEAR DATE		DOWNSTAIRS WASHROOM			KITCHEN SINK		
		TC*	FC**	CMT	TC	FC	CMT
2021							
	26-Jan				L1	L1	
	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: MALASPINA VOLUNTEER FIRE DEPARTMENT #1
- #11035**

Date Prepared: March 14, 2022 **Prepared By:** Caroline Visser

Emergency Contact Information

Contact Name(s)	Phone #	Cell #	Fax # or other #'s	Email
Operator If certified operator give EOC #: Regan Keil - #9197	604-487-1380	604-223-7856		rkeil@qathet.ca
Owner's Name and Address: qathet Regional District 202 – 4675 Marine Ave. Powell River, BC V8A 2L2	604-487-1380	604-483-8201		operations@qathet.ca
Electrician: Foxtrot Electrical Solutions	604-414-3929			
Plumber: Target Plumbing	604-483-5192	604-414-8450		
Equipment Supplier(s): Pete's Plumbing Fred Surridge	604-485-9761 250-954-0368			
Other: Regan Keil	604-487-1380	604-223-7856		rkeil@qathet.ca
Public Health Contact Information				
Drinking Water Officer: Michael Nguyen, DWO	604-485-3324	604-414-5545	778-317-8567	Michael.nguyen@vch.ca
Back-up Health Contact Darren Molder, SEHO	604-885-8711	604-989-1357	604-885-5200	Darren.molder@vch.ca
Back-up Health Contact Jack Davidson, EHO	604-485-3335	604-483-1931	604-314-0596	Jack.Davidson@vch.ca
Medical Health Officer: Dr. Geoff McKee, MHO	604-983-6701	604-842-2357	604-983-6715	geoff.mckee@vch.ca
Back-up Health Contact Mark Ritson, DWO, Manager Health Protection	604-983-6751	604-219-7359	604-988-6516	Mark.ritson@vch.ca

Location of Water Source(s)

Directions to Site: 10 kms south of Powell River at the corner of Ramsey Road and Highway 101. Well is located on right side of the fire hall in a cement well ring on the paved area.



GPS settings: 49° 46' 19.8" N 124° 23' 38.31" 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

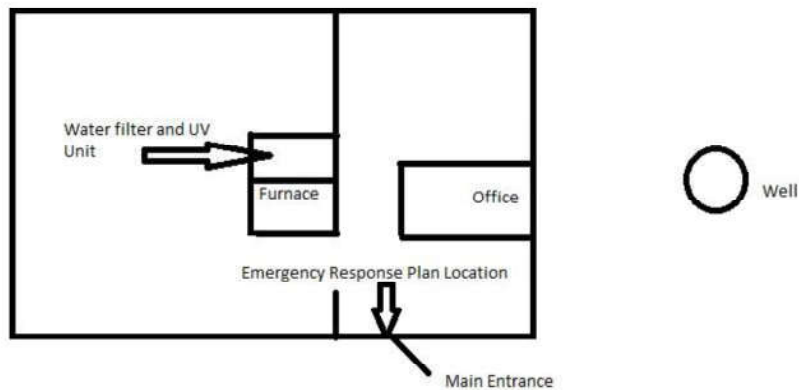
The ERP must be posted in a conspicuous location that is easily accessible to the operator and management of the water supply.

Location of ERP: In office/radio room hanging on the wall (inside main entrance on left side wall). A copy is also kept 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.**

Malaspina Volunteer Fire Department Water System



Highway 101

DO NOT USE WATER NOTICE

**HAYWIRE BAY PARK
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

Haywire Bay Park 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.

