

LUND WATERWORKS DISTRICT

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May, 2024

Notice to Lund Water Users WATER QUALITY ADVISORY

A Lund resident contacted me as he was confused about the Water Quality Advisory message emailed to users on Thursday evening (May 9th). Since others may be similarly confused, we are providing further information for clarification.

On March 26th we received communication from our Drinking Water Officer at Vancouver Coastal Health (VCH) that our water system was to be placed under a **Water Quality Advisory** effective immediately. WQAs are now being issued as standard procedure for systems that do not have a secondary form of disinfection. Lund has only chlorine disinfection. Also, because of the high level of organics in Lund's source water, Thulin Lake, chlorine disinfection produces levels of trihalomethanes which exceed Canadian Drinking Water Standards. Both these deficiencies will be corrected when the planned upgrade project goes ahead.

This original WQA provided details on why the advisory was issued, who was most likely to be affected and what precautions they should take. Copies were emailed to all water users on our email list, posted on public bulletins boards around Lund, and attached to the Boil Water Notice sandwich boards posted at intersections to inform visitors. A Boil Water Notice was not actually required but did alert users about the advisory.

VCH information describes the difference between a Water Quality Advisory and a Boil Water Notice as follows:

Water Quality Advisory Used in situations in which the public health threat posed by the water supply system is modest, and actions can be taken to reduce the risks through means other than requiring a Boil Water Notice or Do Not Use Water Notice.

Boil Water Notice Used in situations in which the public health threat posed by the water supply system is significant and the nature of the threat is one that can be effectively addressed through boiling of the water.

Boil Water Notices are typically issued when the results of bacteriological testing indicate levels of e.coli or Total coliform that exceed Canadian Drinking Water Quality Guidelines.

Because the May 9th WQA may have been confusing to some, we are circulating a more detailed WQA with this notice. Please review it carefully. If you have a vacation rental or other business serving members of the public, ***please post this notice on the premises*** so visitors are informed.

Details on Lund Water System sampling procedures and results are provided overleaf for your information. If you have questions or would like further information please contact LWD at the email address above.

Regards,
Frances Ladret, Receiver

Lund Water Sampling Procedures

Bacteriological Sampling for e.coli total coliform and fecal coliform is done, on average, seven times per month from seven sampling sites on a rotating basis. This evaluates the water quality throughout the system rather than from a single point. Below are sampling results for 2021, 2022, and 2023 as recorded by VCH.

LUND WATER SYSTEM BACTERIOLOGICAL SAMPLING RESULTS			
YEAR	2023	2022	2021
Total Samples Taken	96	86	86
Samples that contain total coliform	2	1	3
Samples that contain e.coli	0	0	1
Samples that contain fecal coliform	0	0	0
Number of consecutive samples that contain total coliform	0	0	0

Chemical Sampling for Trihalomethanes (THMs) is done quarterly. Canadian Drinking Water Guidelines maximum allowable concentration for THMs is 100ppm / ug/L. The most recent sampling results for Lund are below.

LUND WATER CHEMICAL SAMPLING RESULTS		
DATE	SAMPLE SITES	THM READING in ppm
2023-03-29 00:00	FINN BAY	280
	HTL LAUNDRY	210
2023-06-27 00:00	1724 HWY 101	200
	HOTEL LAUNDRY	170
2023-09-13 00:00	FINN BAY	240
	HARBOUR	210
2024-02-06 09:18	FINN BAY	200
	1724 HWY 101	190

From our Drinking Water Officer's annual report: *"Total organic carbon in source water continues to present challenges. This impacts the ability to treat water to full standard required and leads to elevated chlorination by-products"*

Full Spectrum Sampling is done once per year. It analyzes a wide range of aesthetic and health parameters for drinking water. It does not analyze bacteriological counts or THMs. The most recent full spectrum analysis for Lund showed that the water met Maximum Allowable Concentrations according to the Canadian Drinking Water Quality Guidelines for all parameters. It did slightly exceed the Guideline Limit for Turbidity which is an aesthetic objective, not a health consideration.