Attachment 4 Submitted Correspondence

April 13, 2025

TO:

Regional District of Nanaimo Planning Department

Via Email: planning@rdn.bc.ca

And

BC Agricultural Land Commission Island Panel - Applications

Via Email: <u>ALC.Island@gov.bc.ca</u>

Subject: Development Application No. PL2025-050

Lot 15, Block 544, Nanoose District, Plan 32293

Zoning: Rural 1, Electoral Area F

1860 Spring Place, Errington BC VOR 1V0

Dear Sir/Madam;

This correspondence is to be included in the above-noted development application review process and record as material information into the review and disposition of the application.

Summary

The authors of this correspondence are adjacent property owners and respectfully and strongly object, for the reasons stated below, to the inclusion of the application property into the Agricultural Land Reserve (ALR) for the stated purpose of establishing a farm and microbrewery.

Permitted Use Change Request

The subject property and the broader neighbourhood properties are zoned Rural 1. Microbreweries are non-permitted uses in the current neighbourhood zoning. In seeking to have the subject property included in the ALR, the application makes a *de facto* end run around the current zoning to permit a use that is otherwise not permitted across the broader neighbourhood. To approve this inclusion into the ALR would represent a very dangerous precedent for current and future landowners in this neighbourhood who purchase property to benefit from and enjoy the characteristics of the current zoning.

Microbreweries

The application states that the products produced on the subject property will be primarily sold off-site. This aligns with the business model of many microbreweries that typically sell approximately 75% of

their product off-site. However, microbreweries are not restricted to off-site sales and in fact all currently operating microbreweries in the Parksville and Qualicum area have on-site sales through tasting events, brewery tours and gift shops, food sales, and, in some cases, live music. This also aligns with the typical business model of microbreweries and these associated characteristics are not compatible with the current characteristics of the surrounding neighbourhood within the Rural 1 zone. All currently operating microbreweries in the Parksville and Qualicum area are situated in urban commercial neighbourhoods with municipal water supplies and sewage infrastructure that has minimal impact on the quiet enjoyment of residential property situated farther away.

Water Challenges

In Canada, a microbrewery is typically defined as a small-scale brewery producing up to 15,000 barrels (approximately 4.9 million liters) of beer per year. Water use throughout the production processes uses in the range of 10 to 20 times the amount of final product produced. This translates to 49 million litres to 98 million litres of localized aquifer water. One study shows a microbrewery in Vancouver uses 11.7 times the amount of water represented by the water in the final product. It is also counter-intuitive in that the ratio of total water use to the water represented in the final product actually increases for smaller breweries due to the inefficiencies not found in large-scale breweries. This is an extraordinary volume of water from a non-municipal source.

This aggressive water use is particularly impactful for any proposed microbrewery situated in the aquifer that comprises the subject property and all of the broader neighbourhood properties. Aquifer #220 covering the subject property and the broader Errington and Coombs areas is the fastest and highest declining aquifer in the entire Regional District of Nanaimo (RDN). Monitored data from RDN in the 2025 Report on the State of Our Aquifers shows #220 declining over the last five-year period by 0.24 metres per year and declining by 0.27 metres over a timeframe more than five years. Anecdotal data from landowners reliant on #220 indicates that many homes rely on trucked water during dry summer months. Our adjacent property's water supply, and that of at least one other immediate neighbour, is derived from a spring as opposed to a drilled or dug well. Springs are highly sensitive to changes in the underground aquifer.

Simply stated, permitting a high water use brewery in rural aquifer #220 would be grossly irresponsible in terms of RDN's water management strategies. It's also worth noting that the quantity of needed brewery water use does not factor in the additional required irrigation water use for the associated farm proposed in conjunction with the brewery.

Wastewater Effluent

Effluent is the liquid waste stream from a brewery. As identified above, breweries use a significant quantity of water to make beer. The water not leaving the brewery as beer is the effluent and the ratio of effluent to beer is essentially the same as the water needed to make beer, 10 to 20 times the beer produced. Much is added to the waste stream; from the brewhouse, bits of grain and hops are most obvious, but the waste stream also includes kettle trub and the diluted wort that is too weak in sugars to use in brewing; and from the fermentation and aging storage come yeast and beer washings from tank cleaning.

All stages in brewing use an assortment of cleaners, most commonly caustic soda (sodium hydroxide), acids such as phosphoric and nitric, and detergents and sanitizers, often containing chlorinated chemicals. Effluent is most analyzed for biological oxygen demand and total suspended solids prior to treatment in sewage treatment facilities. However, on the subject property, there are no municipal treatment facilities available and disposal is likely to be via a septic system which ultimately infiltrates to the groundwater and aquifer. This raises a significant concern for increased contamination to neighbouring water supply aquifer as well as to the nearby Englishman River.

Other Considerations

The wort boiling process is a major source of odor emissions in breweries. A sulfur or rotten egg aroma is common for fermenting beer with many yeast strains, particularly lagers. The most significant source of rotten egg smells is hydrogen sulfide gas which is produced during active fermentation as a byproduct of the yeast processing sulfur. Odor negatively impacts nearby residents.

Breweries utilize machinery that generates noise, which can be a nuisance to neighbors, especially if operations are conducted late into the evening, including on-site public events.

Closing

Respectfully submitted by

Paul T. Draycott