## Lab Testing requirements/Microbial Count:

It currently seems Vermont is likely going to have a lack of testing labs available to meet the demands of licensed Cultivators at first. This poses potential problems initially for the supply chain. Of course all product should be tested and deemed safe for consumption before reaching consumers.

I would like to discuss what constitutes being safe for consumption on the topic of microbial/ fungal testing.

I urge and advise the state to adopt microbial/fungal count regulations similar to California and Oregon which have huge populations and large Cannabis industries, as opposed to testing regulations similar to Massachusetts and Maine which have much less experience. In California microbial/fungal testing is done to the parts per million. This was ultimately adopted by the state after consulting with many top agricultural consultants, scientists, and physicians. California has also been a national leader with a robust medical cannabis industry since 1996.

Massachusetts is currently testing for microbial to the parts per billion. This is making it extremely difficult for many licensed cultivators to pass testing requirements without costly remediation, which ruins the quality of the products and limits options for many environmentally sustainable and organic cultivation practices, especially for outdoor cultivators who can't control what exists in the natural environment.

Cannabis is one of the most over regulated industries and California one of the most regulated states. Nationally and in California food and produce is allowed to have more present microbial populations than cannabis.

While I would never advocate for harmful microbes to be present on Cannabis, there is an issue with differentiating which types of microbes and funguses are harmless, and which pose potential health risks to humans, especially those with compromised immune systems. In California I use several microbial and fungal products as inputs in our cultivation. Some are lab grade and others an indigenous to our local forests. These organic biological inputs help as a soil input to defend the plants rhizosphere (root system area) against harmful pathogens and viruses as well as aiding in speeding up plant metabolism. I also use these products as a preventative spray to protect against powdery mildew and mold (Botrytis). Some of these products can safely and legally be sprayed on an edible grape crop the day of harvest. I have passed all of my state lab COAs since 2015, even before product was required to be tested. However in Massachusetts by testing to parts per billion these inputs which pose zero human health risk would cause failed lab tests for cultivators.

I recently toured an 80,000 square foot indoor facility in Massachusetts. The VP of cultivation was explaining how they are limited in what fertilizers and soils they can use because of the testing requirements. In their r&d they tried every commercially available certified organic soil and fertilizer and were unable to grow organic product that passed the state labs tests. They are limited to sterile synthetic mediums and fertilizers, and I noticed their quality while grown properly was less than stellar due to this.

I am concerned that if Vermont were to adopt similar testing requirements to Massachusetts many of the states existing craft cultivators, especially outdoor farmers, would fail or find it challenging to grow products that would pass lab testing, and quality in the state would not meet consumers expectation for outstanding organic Cannabis that Vermont has been known for for decades. Vermont has long been a leader in organic farming and produce and this would be a huge step backwards for the states sustainable ideals.

At the end of the day this is about consumer health and safety. It would be foolish for cultivators to fail lab tests for microbe species and counts that are not actually harmful for human consumption. The issue is testing which specific type is present requires more detailed lab analysis and cost. For instance some types of microbe/fungal species have many different varieties, some of which are perfectly safe, although others can be harmful. In some cases it is unrealistic for labs to test for all of them to determine which varieties of a strain are present. I urge the CCB to look closely into California's testing requirements and the reasoning behind them and adopt standards that put human health first, while also allowing cultivators the freedom to express organic diversity in the practices.