Rowshan Reordan, on behalf of Green Leaf Lab,

Testimony to the Measure 91 Joint Committee, February 9, 2015

Thank you to Co-Chair Ann Lininger and Co-Chair Ginny Burdick and Co-Vice Chairs and Committee members for inviting me to testify regarding testing issues.

I am a licensed attorney in the state of Oregon and received my bar in 2006. I have a Master's Degree in Political Science with a concentration in Human Rights.

I am the managing partner of Green Leaf Lab. Our main laboratory is located in Portland, Oregon. We have a secondary location in Roseburg, Oregon. Green Leaf Lab has been in business since 2011, before the Oregon Cannabis Community knew much about the idea of safety and potency testing for cannabis. We have twelve employees, ten of them are full-time and all but two have backgrounds in chemistry and/or other science related fields.

In the course of operating Green Leaf Lab we have found some issues that we ask the committee to consider when analyzing the state of affairs for cannabis laboratories and cannabis testing.

Please consider the following issues:

1. Laboratories should have regulatory oversight. This will ensure a system where there is accountability and standardization for the safety testing of cannabis.

In order to create accountability and standardization, and to ensure that Oregon is complying with the Cole Memorandum¹, we feel that Oregon will be best served with an Oregon based regulatory agency for Oregon based businesses. It is in the best interest of Oregon patients and consumers to have an Oregon based regulatory agency that follows national quality standards that are known to be more stringent than international standards.

2. Independent Third-Party Testing should be required. Requiring independent third-party testing will assist in eliminating conflict of interest issues and assist Oregon in complying with the Cole Memorandum and reinforcing policy that supports public safety.

3. Laboratories should be required to perform random sampling and initiate a chain of custody system for batch testing certification. Batch testing certification should include the option of allowing a system where labs can certify quantities of cannabis using a system of packaging and/or tamper proof seals. This process may aid in diversion control. We believe that producers, processors, wholesalers, and retailers should have the option to maintain possession of certified batch tested products. We ask the committee to decide what a batch size should be to ensure proper safety testing and affordability in testing.

4. More stringent microbiological (mold) testing should be required. The current law requires general screening for molds. This screening process does not require identification of harmful

¹ Memorandum for United States Attorneys from James M. Cole, Deputy Attorney General; guidance regarding marijuana enforcement, August 29, 2013.

molds (for instance, Aspergillus, of which certain species can produce toxins). The current system allows harmful molds to "pass" if the overall screen falls below 10,000 colony forming units per gram. We believe that requiring a more specific microbiological screen for harmful molds will promote public health and safety.

5. More specific pesticide testing should be required. The current law requires a general screening for pesticide classes. This does not include some commonly used pesticides in cannabis production. Furthermore, if a cannabis product tests positive for an Organic Materials Review Institute (OMRI) listed pesticide, it would fail under the current rules. We believe more specific pesticide testing should be required and we ask the committee to consider allowing OMRI approved pesticides.

6. Residual solvent testing should be required. The current law does not require residual solvent testing for cannabis concentrates. The process for making these concentrates may use butane, propane or other potentially harmful compounds. We ask the committee to consider requiring residual solvent testing for the most commonly used compounds utilized in the processing of cannabis concentrates.

7. Standardized methods for potency testing should be required. There are two variables that occur in cannabis potency testing. The first is variation of strength found within a plant itself. The second is variation based on methods of testing that a laboratory uses. Many customers complain about the lack of consistency in test results among laboratories. Standardized methods, such as, but not limited to, sampling procedures for potency testing will assist in eliminating excessive variation in potency test results among laboratories. This will support a system that patients and consumers can trust.

8. Laboratory and testing standards should protect public health, while taking into consideration affordable testing and the legitimization of the cannabis industry. Because cannabis testing is in its infancy, there are many theories regarding the best way to analyze cannabis for safe use. Theories need to be tested through practical application before they are implemented as regulations. For ease of use, and practicality, this may require a process where testing standards and requirements are thoughtfully integrated into practice.

Thank you for allowing me to testify. Please feel free to contact me with further questions or if you would like to visit Green Leaf Lab.

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