

Oregon Cannabis Commission Subcommittee on Research and Leadership. Report on requirements for establishing a state reference lab.

Introduction:

The field of cannabis analytical testing is young and still developing and presents an opportunity for Oregon's cannabis testing industry to develop an expanding and yet unexplored field and to play a role in developing cannabis testing standards at the national level.

Establishing and maintaining a state reference lab will increase public confidence in cannabis and hemp products now available to the general public. It would increase public health and safety in ensuring these products meet the standards in testing, labeling and recall mechanisms expected by the public and that those laboratories serving the public are held to those standards.

A state reference lab should serve as the lab of record in the cannabis testing field and as the steward of an unbiased library of information on cannabis in Oregon and should serve as the public facing repository of cannabis data for research purposes and in developing public policy.

It should also serve to ensure test results across the industry fall within an acceptable range of accuracy when testing identical samples. The reference lab should ensure labeling information is accurate and information not contained on a label is available to the public upon request. An important function of any reference lab will be to help in expanding post-market auditing and ensuring recall protocols already in place for other products intended for consumption by the general public meet the needs of the cannabis industry.

A state reference lab should also create a mechanism, perhaps through a network of independent labs willing to participate in sharing the cost for those Oregonians who may be producing their own flower and other cannabinoid products for personal use and who need access to this service at significantly reduced costs. There are many who wish to determine potency, terpene profiles or unknown contaminants but simply do not have the resources to have product tested.

A state reference lab should work to develop collaborations between private and public research centers to gather and compile information from other research initiatives. It should work to provide services to educate the public and, working through scientific methods to dispel stigma and controversy surrounding cannabis and the use of cannabinoid products.

Here are the OCC Research & Leadership subcommittee's recommendations regarding a state reference laboratory:

Reference Lab.

1. The state shall allocate funding to establish a state reference laboratory including an annual operations budget. The tasks of the state reference lab shall include, but are not limited to:
 - a. Developing analytical testing standards: methods, Standard Operating Procedures for the commercial testing of cannabis and hemp.
 - b. Serve as a training institute for analytical labs, their staff, and university students.
 - c. Provide post-market auditing of cannabis products to verify Certificates of Analysis (CoA's) and ensure product labeling accuracy.

- d. Expand the list of required testing and reporting to include terpene profiles, heavy metals, certain microbials and mycotoxins, adulterants and residual solvents. Establish a more comprehensive panel beyond the current list.
 - e. Develop annual, random audit requirements per lab in each cannabis product category such as vape oil, flower, edibles, concentrates and extracts.
 - f. Establish, in alignment with existing statute and rule, a product recall mechanism.
2. Develop and establish cannabis and hemp specific training for accreditation and chain of custody officers, as well as laboratory and research personnel.
3. Coordinate with ORELAP to define fee structure, loss & restoration of laboratory accreditation/licensure.

Reference Library.

2. State Reference laboratory shall establish and maintain a digital, central library for Certificates of Analysis and shall:
 - a. Develop specific language establishing CoA's as public records and are not the exclusive property of the cultivator, producer, or manufacturer.
 - b. Require records be available in real time and that all records be machine-readable.
 - c. Require lab results accompany a batch through the supply chain, either physically or digitally.
 - d. Ensure CoA's are available upon request at retail outlets.
 - e. Require all records be available digitally for a period of not less than 7 years.

General Notes on Testing:

Cannabis is well known for its ability to remove toxins such as heavy metals from the soil and reports over the years from labs that have tested samples for these toxins have shown this to be a concern and recommend additional testing requirements be added. This will add to the cost of testing and adds a finer point on the need for access to testing be at a significantly reduced cost.

The state's list of pesticides is reviewed on an ongoing basis by the Department of Agriculture and adding those products that are discovered to have a negative impact on public health to the list of prohibited products is also ongoing.

In the world of pesticides, the general rule is "the label is the law." Labels for pesticides for the public use have a list of plants that the product may be applied to and if necessary, how many days after application produce may be eaten. The process of adding any plant that the pesticide could be safely applied to is long and costly. Perhaps Oregon, through its reference lab could lead the way in accelerating this process and mitigating some of the costs by already having completed preliminary studies and work necessary to meet the requirements for adding a plant to a label.