Washington State
Liquor and Cannabis Board

Date: March 2, 2022

To: David Postman, Board Chair
Ollie Garrett, Board Member

From: Jeff Kildahl, Policy and Rules Coordinator

Copy: Rick Garza, Agency Director
Toni Hood, Deputy Director
Justin Nordhorn, Director of Policy and External Affairs
Becky Smith, Licensing Director
Chandra Brady, Director of Education and Enforcement
Kathy Hoffman, Policy and Rules Manager

Subject: Request for approval of final rules (CR 103) regarding amendments to WAC 314-55-101 – Quality assurance sampling protocols; WAC 314-55-102 – Quality assurance testing; and WAC 314-55-1025 – Proficiency testing

The Policy and Rules Coordinator requests that the Board adopt the final rules, and approve the CR 103 to amend existing rules regarding marijuana quality assurance testing.

The Board has been briefed on the rule development background for this rule making project. There were many public comments received. A CR 103 memorandum, CR 103 form, Concise Explanatory Statement, Public Comment Table, and rule text are attached.

If approved, the Policy and Rules Coordinator will file the rules with the Office of the Code Reviser. The effective date of the rules will be 31 days after filing, or April 2, 2022.

_____ Approve _____ Disapprove _____ _____
David Postman, Chair Date

_____ Approve _____ Disapprove _____ _____
Ollie Garrett, Board Member Date

Attachments: CR 103 Memorandum
Concise Explanatory Statement

Washington State
Liquor and Cannabis Board

CR 103 Memorandum

Regarding WAC 314-55-101 – Quality assurance sampling protocols; WAC 314-55-102 – Quality assurance testing; and WAC 314-55-1025 – Proficiency testing.

Date: March 2, 2022
Presented by: Jeff Kildahl, Policy and Rules Coordinator

Background

In early 2018, several stakeholders, including medical marijuana patients, consumers, and licensees, urged the WSLCB to require marijuana producers and processors to test adult use marijuana crops for pesticides and heavy metals. These partners asserted that such a move, already adopted in other states, would inspire confidence among consumers, increase access to medically compliant products, and bolster sales. In August 2018, the WSLCB began the initial stages of rule development regarding marijuana quality control and product requirements. Among the rule changes being considered was whether all marijuana products should be tested for pesticides and heavy metals, because neither test is required for adult use marijuana products in Washington.

Following the urging of stakeholders, these rule changes introduce in rule the requirement for pesticide testing of all marijuana products. These rule changes also allow the WSLCB to conduct randomized or investigation driven heavy metal testing through the Washington State Department of Agriculture (WSDA). In order to meet potential demand for pesticide testing, there are currently five marijuana testing labs in Washington capable of testing for the full suite of I-502 tests, along with pesticides.

Stakeholder Engagement

The WSLCB hosted three Deliberative Dialogue sessions on marijuana product testing in January and February 2021, and three Listen and Learn sessions, with the most recent session held virtually on October 20, 2021. During these sessions, the WSLCB collected significant input from industry members, associations, and other interested parties representing processors and producers across all tiers, and many others. These sessions were announced via GovDelivery and other media platforms, and open to the public, licensees, and any interested party to encourage community input. The WSLCB is aware that pesticide and heavy metal testing is a topic of interest to many Washington State citizens.

The WSLCB received a number of written and oral comments during and after the most recent Listen and Learn session held virtually on October 20, 2021 on a conceptual draft rule version of these rules. Comments continue to be offered into early December 2021. These comments did not embody or represent broad licensee or lab agreement on any specific theme or themes. These comments concerned sample collection, lot size, increased costs to producers and processors, and other topics, along with comments that did not pertain to this section of rule.

It is important to note that the first two “Listen and Learn” sessions on marijuana products were among the first that the WSLCB offered to increase and enrich stakeholder engagement in the rule development process. Initially, and understandably, in person participation was somewhat guarded as the licensed community and others became familiar with the approach, and the concept of collaborative rule making. It is also important to note that few producers and processors attended the first meeting despite all licensees receiving notice of the meeting more than two weeks in advance. By the second session, attendees were better prepared to present and discuss ideas and solutions, and the conversation continued well beyond the scheduled session time, although again, few producers and processors attended in person even though messaging was broadly distributed to all licensees through several platforms. However, several of these entities provided written comment in the way of email to the rules coordinator during the meeting. These were shared at the meetings, and throughout the rule development process. The most recent session was held virtually on October 20, 2021, and many comments were received during and after the session.

The public hearing for these rules was held virtually on December 8, 2021 and oral testimony was offered by approximately twenty attendees.

Rule Necessity

Rules are needed for the following reasons:

Current testing requirements for adult use marijuana are intended to ensure that products for sale are safe and have accurate potency levels. However, Washington state adult use marijuana products are not currently required to be tested for pesticides and heavy metals, and although not precluded from doing so, many producers and processors do not perform this testing. Based on a number of elements, including consumer concern and national best practices, it has become evident that standardized testing for all marijuana products produced, processed, and sold in Washington State is necessary. Washington State is the only state with both adult use and medical programs that does not require pesticide and heavy metal testing for all products.

There is no guidance available to the WSLCB or any other state agency regulating marijuana from federal agencies who set standards for agriculture, food, and other products because marijuana remains classified as a Schedule I drug, and federally illegal. This presents regulatory challenges to the WSLCB, regulators throughout the country, and the industry since there is limited funding to support research on how marijuana tainted with potential toxins affects humans. However, while the possible health impact of consuming marijuana products with unapproved pesticides is an emerging area of research, the overarching goal of the WSLCB is to protect public health and safety, and to assure that all products sold within the I-502 market are safe for all consumers.

With the recent increase in hemp-derived delta-8, delta-9, and other unregulated products entering the I-502 market, it is important at this time to require pesticide testing and random or investigation driven heavy metal testing for adult use marijuana products to protect public health and safety.

Description of Rule Changes

Amended Section. WAC 314-55-101 – Updates existing sample collection protocols designed to reduce product contamination during and after sampling, storage, and transportation. Updates labelling requirements for samples. Increases the maximum amount of marijuana flower that may be represented by a single I-502 panel of tests, and changes the number of one-gram flower samples required for testing. Removes allowance for labs to return any unused portion of a sample to the licensee. Updates, reorganizes and streamlines rule language where appropriate.

Amended Section. WAC 314-55-102 – Reaffirms existing protocols, and updates, reorganizes, and streamlines rule language where appropriate to assure scientific accuracy. Provides more detail regarding testing levels for required I-502 tests. Adds requirement for pesticide testing for marijuana products. Adds language allowing the WSLCB may conduct randomized or investigation-driven testing for heavy metals. Updates rule language regarding product retesting, remediation of failed lots, expiration of certificates of analysis, and referencing of samples. Adds a new subsection (11) as follows: All marijuana products produced, processed, distributed or sold after the effective date of these rules must comply with these rules and this chapter, however, post-harvest products in the possession of, or being processed by a licensee that do not comply with these rules as of their effective date may be sold, distributed or both within a reasonable period of time determined by the board.

Amended Section. WAC 314-55-1025 – Updates language to include “board” where appropriate consistent with statutory reference. Adds updated reporting requirements for lab proficiency testing. language to require laboratory to authorize release all results at the same time to the laboratory and the board, or the board’s vendor.

Variance between proposed rule (CR 102) and final rule:

WAC 314-55-102 amended to include a new subsection (11) as follows:

(11) All marijuana products produced, processed, distributed or sold after the effective date of these rules must comply with these rules and this chapter, however, post-harvest products in the possession of, or being processed by a licensee that do not comply with these rules as of their effective date may be sold, distributed or both within a reasonable period of time determined by the board.

This non-substantive amendment was added to allow for a transition period for rule implementation.

Rule Implementation

Informing and Educating Persons Impacted by the Rule

To help inform and educate persons impacted by the rule, the WSLCB will:

- Email notice with the adoption materials to the rule making and licensee distribution lists, and the general WSLCB GovDelivery list;
- Post rule adoption materials, including final rule language, final analysis (Concise Explanatory Statement), and any other relevant documents on the rulemaking webpage for public access.
- Provide information and training on request.
- Provide a summary document explaining these rule amendments.

Promoting and Assisting Voluntary Compliance

WSLCB will promote and assist voluntary compliance through technical assistance.

- WSLCB staff are available to respond to phone and email inquiries about the rule.
- Agency leadership and staff have actively participated in rule development, and are familiar with the final product. Internal and external education efforts to share knowledge and assure consistent application of rule will be supported.
- Rule and guidance documents will be available on the WSLCB website.
- WSLCB will use available and customary resources to disseminate materials and information to all persons impacted by the rules.

These actions are designed to inform and educate all persons impacted by the rule.

Training and Informing WSLCB Staff

Internal guidance documents may be prepared as necessary. The WSLCB will also consider:

- Provision of internal and external training and education, as needed, potentially including webinars, training, and videos if appropriate.
- Coordinating and centrally locating decisions to assure consistency between agency, staff, and industry.

Rule Effectiveness Evaluation

The WSLCB will evaluate the effectiveness of these rules in the following ways, including but not limited to:

- Monitoring questions received after the effective date of these rules, and adjusting training and guidance accordingly.
- Monitoring requests for rule language revisions or changes.
- Monitoring requests for rule interpretation.
- Monitoring licensee feedback including, but not limited to, requests for assistance.

CODE REVISER USE ONLY

RULE-MAKING ORDER
PERMANENT RULE ONLY

CR-103P (December 2017)
(Implements RCW 34.05.360)

Agency: Washington State Liquor and Cannabis Board

Effective date of rule:

Permanent Rules

☒ 31 days after filing.

☐ Other (specify) _____ **(If less than 31 days after filing, a specific finding under RCW 34.05.380(3) is required and should be stated below)**

Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?

☐ Yes ☒ No If Yes, explain:

Purpose: The Washington State Liquor and Cannabis Board (WSLCB) adopted amendments to WAC 314-55-101, WAC 314-55-102, and WAC 314-55-1025 to require that all marijuana products produced and sold in Washington State are tested for pesticides. The adopted rule amendments also allow the Washington State Liquor and Cannabis Board (WSLCB) to conduct random or investigation driven testing for heavy metals in marijuana products.

Citation of rules affected by this order:

New: None
Repealed: None
Amended: WAC 314-55-101, 314-55-102, 314-55-1025
Suspended: None

Statutory authority for adoption: RCW 69.50.345 and RCW 69.50.348.

Other authority: N/A

PERMANENT RULE (Including Expedited Rule Making)

Adopted under notice filed as WSR 22-01-055 on December 8, 2021 (date).

Describe any changes other than editing from proposed to adopted version: WAC 315-55-102 is amended to include a new subsection as follows:

(11) All marijuana products produced, processed, distributed or sold after the effective date of these rules must comply with these rules and this chapter, however, post-harvest products in the possession of, or being processed by a licensee that do not comply with these rules as of their effective date may be sold, distributed or both within a reasonable period of time determined by the board.

This non-substantive amendment was added to allow for a transition period for rule implementation.

If a preliminary cost-benefit analysis was prepared under RCW 34.05.328, a final cost-benefit analysis is available by contacting:

Name: Jeff Kildahl
Address: 1025 Union Avenue SE, Olympia WA 98501
Phone: 360-664-1781
Fax: 360-664-3208
TTY:
Email: rules@lcb.wa.gov
Web site: www.lcb.wa.gov
Other:

Note: If any category is left blank, it will be calculated as zero. No descriptive text.

Count by whole WAC sections only, from the WAC number through the history note. A section may be counted in more than one category.

The number of sections adopted in order to comply with:

Federal statute:	New	____	Amended	____	Repealed	____
Federal rules or standards:	New	____	Amended	____	Repealed	____
Recently enacted state statutes:	New	____	Amended	____	Repealed	____

The number of sections adopted at the request of a nongovernmental entity:

	New	____	Amended	____	Repealed	____

The number of sections adopted on the agency's own initiative:

	New	____	Amended	3	Repealed	____

The number of sections adopted in order to clarify, streamline, or reform agency procedures:

	New	____	Amended	____	Repealed	____

The number of sections adopted using:

Negotiated rule making:	New	____	Amended	____	Repealed	____
Pilot rule making:	New	____	Amended	____	Repealed	____
Other alternative rule making:	New	____	Amended	3	Repealed	____

Date Adopted: March 2, 2022	**Signature:** Place signature here
Name: David Postman	
Title: Chair	

AMENDATORY SECTION (Amending WSR 17-12-032, filed 5/31/17, effective 8/31/17)

WAC 314-55-101 Quality ((~~assurance sampling protocols~~)) control sampling. (1) ((~~To ensure quality assurance samples submitted to certified third-party laboratories (certified labs) are representative from the lot or batch from which they were sampled as required in RCW 69.50.348, licensed producers, licensed processors, certified labs, and their employees must adhere to the minimum sampling protocols as provided in this section.~~

(2) ~~**Sampling protocols for all marijuana product lots and batches:**~~

~~(a) Samples must be deducted in a way that is most representative of the lot or batch and maintains the structure of the marijuana sample. Licensees, certified labs, and their employees may not adulterate or change in any way the representative sample from a lot or batch before submitting the sample to certified labs. This includes adulterating or changing the sample in any way as to inflate the level of potency, or to hide any microbiological contaminants from the required microbiological screening such as, but not limited to:~~

~~(i) Adulterating the sample with kief, concentrates, or other extracts;~~

~~(ii) Treating a sample with solvents to hide the microbial count of the lot or batch from which it was deducted. This subsection does not prohibit the treatment of failed lots or batches with methods approved by the WSLCB; or~~

~~(iii) Pregrinding a flower lot sample.~~

~~(b) All samples must be taken in a sanitary environment using sanitary practices and ensure facilities are constructed, kept, and maintained in a clean and sanitary condition in accordance with rules and as prescribed by the Washington state department of agriculture under chapters 16-165 and 16-167 WAC.~~

~~(c) Persons collecting samples must wash their hands prior to collecting a sample from a lot or batch, wear appropriate gloves while preparing or deducting the lot or batch for sample collection, and must use sanitary utensils and storage devices when collecting samples.~~

~~(d) Samples must be placed in a sanitary plastic or glass container, and stored in a location that prevents the propagation of pathogens and other contaminants, such as a secure, low-light, cool and dry location.~~

~~(e) The licensee must maintain the lot or batch from which the sample was deducted in a secure, low-light, cool, and dry location to prevent the marijuana from becoming contaminated or losing its efficacy.~~

~~(f) Each quality assurance sample must be clearly marked "quality assurance sample" and be labeled with the following information:~~

~~(i) The sixteen digit identification number generated by the traceability system;~~

~~(ii) The license number and name of the certified lab receiving the sample;~~

~~(iii) The license number and trade name of the licensee sending the sample;~~

~~(iv) The date the sample was collected; and~~

~~(v) The weight of the sample.~~)) All licensed marijuana processors, producers, certified labs, and certified lab employees must com-

ply with the sampling procedures described in this section, consistent with RCW 69.50.348. Noncompliance may result in disciplinary action as described in this chapter and applicable law.

(2) **Sample collection.** All samples of marijuana, useable marijuana, or marijuana-infused products must be submitted to a certified lab for testing consistent with this chapter.

(a) All samples must be deducted, stored, and transported in a way that prevents contamination and degradation.

(b) To maximize sample integrity, samples must be placed in a sanitary container and stored in a location that prevents contamination and degradation.

(c) Each quality control sample container must be clearly marked "quality control sample" and labeled with the following information:

(i) The certificate number and name of the certified lab receiving the sample;

(ii) The license number and registered trade name of the licensee sending the sample;

(iii) The date the sample was collected; and

(iv) The weight of the marijuana, useable marijuana, or marijuana-infused product the sample was collected from.

(d) Sampling and analysis requirements apply to all marijuana products regulated by the board.

(3) **Additional sampling protocols for ((~~flower lots~~)) quantities of marijuana flower:**

(a) ((~~Licensees or certified labs must collect a minimum of four separate samples from each marijuana flower lot up to five pounds. Licensees or certified labs may collect more samples than this minimum, but must not collect less. The~~)) Samples must be of roughly equal weight not less than one gram each. Each sample must be deducted from a harvest as defined in WAC 314-55-010(14).

(b) ((~~The four separate samples must be taken from different quadrants of the flower lot. A quadrant is the division of a lot into four equal parts. Dividing a lot into quadrants prior to collecting samples must be done in a manner that ensures the samples are collected from four evenly distributed areas of the flower lot and may be done visually or physically.~~

~~(c) The four samples may be placed together in one container conforming to the packaging and labeling requirements in subsection (2) of this section for storage and transfer to a certified lab.~~)) For marijuana flower weighing up to 10 pounds, a minimum of eight samples must be taken.

(c) For marijuana flower weighing 10 pounds or more but less than 20 pounds, a minimum of 12 samples must be taken.

(d) For marijuana flower weighing 20 pounds or more but less than 30 pounds, a minimum of 15 samples must be taken.

(e) For marijuana flower weighing 30 pounds or more but less than 40 pounds, a minimum of 18 samples must be taken.

(f) For marijuana flower weighing 40 pounds or more but not more than 50 pounds, a minimum of 19 samples must be taken.

(4) **Sample retrieval and transportation.** Certified labs may retrieve samples from a marijuana licensee's licensed premises and transport the samples directly to the lab. ((~~Certified labs may also return any unused portion of the samples.~~))

(5) Certified labs ((~~may~~)) must reject or fail a sample if the lab has reason to believe the sample was not collected in the manner required by this section, adulterated in any way, contaminated with

known or unknown solvents, or manipulated in a manner that violates the sampling protocols, limit tests, or action levels.

((~~(6) The WSLCB or its designee will take immediate disciplinary action against any licensee or certified lab that fails to comply with the provisions of this section or falsifies records related to this section including, without limitation, revoking the license the licensed producer or processor, or certification of the certified lab.~~))

AMENDATORY SECTION (Amending WSR 17-12-032, filed 5/31/17, effective 8/31/17)

WAC 314-55-102 Quality assurance ((~~testing~~)) and quality control. ((~~A third-party testing lab must be certified by the WSLCB or the WSLCB's vendor as meeting the WSLCB's accreditation and other requirements prior to conducting quality assurance tests required under this section.~~

~~(1) **Quality assurance fields of testing.** Certified labs must be certified to the following fields of testing by the WSLCB or its designee and must adhere to the guidelines for each quality assurance field of testing listed below, with the exception of mycotoxin, heavy metal, or pesticide residue screening. Certification to perform mycotoxin, heavy metals and pesticides may be obtained but is not required to obtain certification as a testing lab. A lab must become certified in all fields of testing prior to conducting any testing or screening in that field of testing, regardless of whether the test is required under this section.~~

~~(a) **Potency analysis.**~~

~~(i) Certified labs must test and report the following cannabinoids to the WSLCB when testing for potency:~~

~~(A) THCA;~~

~~(B) THC;~~

~~(C) Total THC;~~

~~(D) CBDA;~~

~~(E) CBD; and~~

~~(F) Total CBD.~~

~~(ii) Calculating total THC and total CBD.~~

~~(A) Total THC must be calculated as follows, where M is the mass or mass fraction of delta-9 THC or delta-9 THCA: M total delta-9 THC = M delta-9 THC + (0.877 x M delta-9 THCA).~~

~~(B) Total CBD must be calculated as follows, where M is the mass or mass fraction of CBD and CBDA: M total CBD = M CBD + (0.877 x M CBDA).~~

~~(iii) Regardless of analytical equipment or methodology, certified labs must accurately measure and report the acidic (THCA and CBDA) and neutral (THC and CBD) forms of the cannabinoids.~~

~~(b) **Potency analysis for flower lots.**~~

~~(i) Certified labs must test and report the results for the required flower lot samples as described in WAC 314-55-101(3) for the following required cannabinoids:~~

~~(A) THCA;~~

~~(B) THC;~~

~~(C) Total THC;~~

~~(D) CBDA;~~

~~(E) CBD; and~~

~~(F) Total CBD.~~

~~(ii) Calculating total THC and total CBD.~~

~~(A) Total THC must be calculated as follows, where M is the mass or mass fraction of delta-9 THC or delta-9 THCA: M total delta-9 THC = M delta-9 THC + (0.877 x M delta-9 THCA).~~

~~(B) Total CBD must be calculated as follows, where M is the mass or mass fraction of CBD and CBDA: M total CBD = M CBD + (0.877 x M CBDA).~~

~~(c) Certified labs may combine in equal parts multiple samples from the same flower lot for the purposes of the following tests after the individual samples described in WAC 314-55-101(3) have been tested for potency analysis.~~

~~(i) **Moisture analysis.** The sample and related lot or batch fails quality assurance testing for moisture analysis if the results exceed the following limits:~~

~~(A) Water activity rate of more than 0.65 a_w; and~~

~~(B) Moisture content more than fifteen percent.~~

~~(ii) **Foreign matter screening.** The sample and related lot or batch fail quality assurance testing for foreign matter screening if the results exceed the following limits:~~

~~(A) Five percent of stems 3mm or more in diameter; and~~

~~(B) Two percent of seeds or other foreign matter.~~

~~(iii) **Microbiological screening.** The sample and related lot or batch fail quality assurance testing for microbiological screening if the results exceed the following limits:~~

	Enterobacteria (bile-tolerant gram-negative bacteria)	***E. coli* (pathogenic strains) and *Salmonella spp.***
Unprocessed Plant Material	10^4	Not detected in 1g
Extracted or processed Botanical Product	10^3	Not detected in 1g

~~(iv) **Mycotoxin screening.** The sample and related lot or batch fail quality assurance testing for mycotoxin screening if the results exceed the following limits:~~

~~(A) Total of Aflatoxin B1, B2, G1, G2: 20 µg/kg of substance; and~~

~~(B) Ochratoxin A: 20 µg/kg of substance.~~

~~(d) **Residual solvent screening.** Except as otherwise provided in this subsection, a sample and related lot or batch fail quality assurance testing for residual solvents if the results exceed the limits provided in the table below. Residual solvent results of more than 5,000 ppm for class three solvents, 50 ppm for class two solvents, and 2 ppm for class one solvents as defined in *United States Pharmacopoeia, USP 30 Chemical Tests / <467> - Residual Solvents (USP <467>)* not listed in the table below fail quality assurance testing. When residual solvent screening is required, certified labs must test for the solvents listed in the table below at a minimum.~~

Solvent*	**ppm**
Acetone	5,000
Benzene	2
Butanes	5,000
Cyclohexane	3,880
Chloroform	2
Dichloromethane	600

Solvent*	ppm
Ethyl acetate	5,000
Heptanes	5,000
Hexanes	290
Isopropanol (2-propanol)	5,000
Methanol	3,000
Pentanes	5,000
Propane	5,000
Toluene	890
Xylene**	2,170

*And isomers thereof.
**Usually 60% *m*-xylene, 14% *p*-xylene, 9% *o*-xylene with 17% ethyl benzene.

(c) **Heavy metal screening.** A sample and related lot or batch fail quality assurance testing for heavy metals if the results exceed the limits provided in the table below.

Metal	µ/daily dose (5 grams)
Inorganic arsenic	10.0
Cadmium	4.1
Lead	6.0
Mercury	2.0

(2) **Quality assurance testing required.** The following quality assurance tests are the minimum required tests for each of the following marijuana products, respectively. Licensees and certified labs may elect to do multiple quality assurance tests on the same lot or testing for mycotoxin, pesticides, or heavy metals pursuant to chapter 246-70 WAC.

(a) **General quality assurance testing requirements for certified labs.**

(i) Certified labs must record an acknowledgment of the receipt of samples from producers or processors in the WSLCB seed to sale traceability system. Certified labs must also verify if any unused portion of the sample was destroyed or returned to the licensee after the completion of required testing.

(ii) Certified labs must report quality assurance test results directly to the WSLCB traceability system when quality assurance tests for the field of testing are required within twenty-four hours of completion of the test(s).

(iii) Certified labs must fail a sample if the results for any limit test are above allowable levels regardless of whether the limit test is required in the testing tables in this section.

(b) **Marijuana flower lots and other material lots.** Marijuana flower lots or other material lots require the following quality assurance tests:

Product	Test(s) Required
Lots of marijuana flowers or other material that will not be extracted	1. Moisture content 2. Potency analysis 3. Foreign matter inspection 4. Microbiological screening 5. Mycotoxin screening

(c) **Intermediate products.** Intermediate products must meet the following requirements related to quality assurance testing:

(i) All intermediate products must be homogenized prior to quality assurance testing;

(ii) For the purposes of this section, a batch is defined as a single run through the extraction or infusion process;

(iii) A batch of marijuana mix may not exceed five pounds and must be chopped or ground so no particles are greater than 3 mm; and

(iv) All batches of intermediate products require the following quality assurance tests:

Product	Test(s) Required Intermediate Products
Marijuana mix	1. Moisture content* 2. Potency analysis 3. Foreign matter inspection* 4. Microbiological screening 5. Mycotoxin screening
Concentrate or extract made with hydrocarbons (solvent based made using n-butane, isobutane, propane, heptane, or other solvents or gases approved by the board of at least 99% purity)	1. Potency analysis 2. Mycotoxin screening* 3. Residual solvent test
Concentrate or extract made with a CO_2 extractor like hash oil	1. Potency analysis 2. Mycotoxin screening* 3. Residual solvent test
Concentrate or extract made with ethanol	1. Potency analysis 2. Mycotoxin screening* 3. Residual solvent test
Concentrate or extract made with approved food grade solvent	1. Potency analysis 2. Microbiological screening* 3. Mycotoxin screening* 4. Residual solvent test
Concentrate or extract (nonsolvent) such as kief, hash, rosin, or bubble hash	1. Potency analysis 2. Microbiological screening 3. Mycotoxin screening
Infused cooking oil or fat in solid form	1. Potency analysis 2. Microbiological screening* 3. Mycotoxin screening*

* Field of testing is only required if using lots of marijuana flower and other plant material that has not passed QA testing.

(d) **End products.** All marijuana, marijuana-infused products, marijuana concentrates, marijuana mix packaged, and marijuana mix infused sold from a processor to a retailer require the following quality assurance tests:

Product	Test(s) Required End Products
Infused solid edible	Potency analysis
Infused liquid (like a soda or tonic)	Potency analysis
Infused topical	Potency analysis

~~Product~~	~~Test(s) Required End Products~~
~~Marijuana mix packaged (loose or rolled)~~	~~Potency analysis~~
~~Marijuana mix infused (loose or rolled)~~	~~Potency analysis~~
~~Concentrate or marijuana-infused product for inhalation~~	~~Potency analysis~~

~~(c) End products consisting of only one intermediate product that has not been changed in any way are not subject to potency analysis.~~

~~(3) No lot of usable flower, batch of marijuana concentrate, or batch of marijuana-infused product may be sold or transported until the completion and successful passage of quality assurance testing as required in this section, except:~~

~~(a) Business entities with multiple locations licensed under the same UBI number may transfer marijuana products between the licensed locations under the same UBI number prior to quality assurance testing; and~~

~~(b) Licensees may wholesale and transfer batches or lots of flower and other material that will be extracted and marijuana mix and nonsolvent extracts for the purposes of further extraction prior to completing required quality assurance testing. Licensees may wholesale and transfer failed lots or batches to be extracted pursuant to subsection (5) of this section.~~

~~(4)~~ **~~Samples, lots, or batches that fail quality assurance testing.~~**

~~(a) Upon approval by the WSLCB, failed lots or batches may be used to create extracts. After processing, the extract must pass all quality assurance tests required in this section before it may be sold.~~

~~(b)~~ **~~Retesting.~~** ~~At the request of the producer or processor, the WSLCB may authorize a retest to validate a failed test result on a case-by-case basis. All costs of the retest will be borne by the producer or the processor requesting the retest. Potency retesting will generally not be authorized.~~

~~(c)~~ **~~Remediation.~~** ~~Producers and processors may remediate failed harvests, lots, or batches so long as the remediation method does not impart any toxic or deleterious substance to the usable marijuana, marijuana concentrates, or marijuana-infused product. Remediation solvents or methods used on the marijuana product must be disclosed to a licensed processor the producer or producer/processor transfers the products to; a licensed retailer carrying marijuana products derived from the remediated harvest, lot, or batch; or consumer upon request. The entire harvest, lot, or batch the failed sample(s) were deducted from must be remediated using the same remediation technique. No remediated harvest, lots or batches may be sold or transported until the completion and successful passage of quality assurance testing as required in this section.~~

~~(5)~~ **~~Referencing.~~** ~~Certified labs may reference samples for mycotoxin, heavy metals, and pesticides testing to other certified labs by subcontracting for those fields of testing. Labs must record all referencing to other labs on a chain-of-custody manifest that includes, but is not limited to, the following information: Lab name, certification number, transfer date, address, contact information, delivery personnel, sample ID numbers, field of testing, receiving personnel.~~

~~(6) Certified labs are not limited in the amount of usable marijuana and marijuana products they may have on their premises at any given time, but a certified lab must have records proving all marijuana and marijuana-infused products in the certified lab's possession are held only for the testing purposes described in this section.~~

~~(7) Upon the request of the WSLCB or its designee, a licensee or a certified lab must provide an employee of the WSLCB or their designee samples of marijuana or marijuana products or samples of the growing medium, soil amendments, fertilizers, crop production aids, pesticides, or water for random compliance checks. Samples may be screened for pesticides and chemical residues, unsafe levels of heavy metals, and used for other quality assurance tests deemed necessary by the WSLCB.~~)) (1) **Lab certification and accreditation for quality control testing.** To become certified, a third-party lab must meet the board's certification and accreditation requirements as described in WAC 314-55-0995 and this chapter before conducting quality control tests required under this section.

(a) Certified labs must be certified to conduct the following fields of testing:

(i) Water activity;

(ii) Potency analysis;

(iii) Foreign matter inspection;

(iv) Microbiological screening;

(v) Mycotoxin screening;

(vi) Pesticide screening; and

(vii) Residual solvent screening.

(b) Certified labs may be certified for heavy metal testing. Certified labs must comply with the guidelines for each quality control field of testing described in this chapter if they offer that testing service.

(c) Certified labs may reference samples for mycotoxin, heavy metal, or pesticide testing by subcontracting for those fields of testing.

(2) **General quality control testing requirements for certified labs.**

(a) Certified labs must record an acknowledgment of the receipt of samples from producers or processors. Certified labs must also verify if any unused portion of the sample is destroyed after the completion of required testing.

(b) Certified labs must report quality control test results directly to the board in the required format.

(c) Product must not be converted, transferred, or sold by the licensee until the required tests are reported to the board and the licensee.

(d) Certified labs must fail a sample if the results for any limit test are above allowable levels regardless of whether the limit test is required in the testing tables in this chapter.

(e) Certified labs must test samples on an "as is" or "as received" basis.

(f) For the purposes of this section, limits have been written to the number of significant digits that laboratories are expected to use when reporting to the board and on associated certificates of analysis.

(3) **Quality control analysis and screening.** The following analysis and screening are only required for samples that have not been previously tested, or that have failed quality control testing.

(a) **Potency analysis.**

(i) Certified labs must test and report the following cannabinoids to the board when testing for potency:

(A)

Cannabinoid	Lower Limit of Quantitation (mg/g)	CAS #
CBD	1.0	13956-29-1
CBDA	1.0	1244-58-2
Δ^9-THC	1.0	1972-08-3
Δ^9-THCA	1.0	23978-85-0

(B) Total THC;

(C) Total CBD.

(ii) Calculating total THC and total CBD.

(A) Total THC must be calculated as follows, where M is the mass or mass fraction of delta-9 THC or delta-9 THCA: M total delta-9 THC = M delta-9 THC + (0.877 × M delta-9 THCA).

(B) Total CBD must be calculated as follows, where M is the mass or mass fraction of CBD and CBDA: M total CBD = M CBD + (0.877 × M CBDA).

(iii) Regardless of analytical equipment or methodology, certified labs must accurately measure and report the acidic (THCA and CBDA) and neutral (THC and CBD) forms of the cannabinoids.

(b) **Water activity testing.** The sample fails quality control testing for water activity if the results exceed the following limits:

(i) Water activity rate of more than 0.65 a_w for useable marijuana;

(ii) Water activity rate of more than 0.85 a_w for solid edible products.

(c) **Foreign matter screening.** The sample fails quality control testing for foreign matter screening if the results exceed the following limits:

(i) Five percent of stems 3 mm or more in diameter; or

(ii) Two percent of seeds or other foreign matter; or

(iii) One insect fragment, one hair, or one mammalian excreta in sample.

(d) **Microbiological screening.** The sample and the related population fails quality control testing for microbiological screening if the results exceed the following limits:

Unprocessed Plant Material	Colony Forming Unit per Gram (CFU/g)
Bile Tolerant Gram Negative bacteria (BTGN)	$1.0 * 10^4$
Shiga toxin-producing Escherichia coli (STEC)	≤1
Salmonella spp.	≤1

Processed Plant Material	Colony Forming Unit per Gram (CFU/g)
Bile Tolerant Gram Negative bacteria (BTGN)	$1.0 * 10^3$
Shiga toxin-producing Escherichia coli (STEC)	≤1
Salmonella spp.	≤1

(e) **Mycotoxin screening.** The sample and the related population fails quality control testing if the results exceed the following limits:

Mycotoxin	µg/kg	CAS #
Aflatoxins (Sum of Isomers)	20.	
• Aflatoxin B1		1162-65-8
• Aflatoxin B2		7220-81-7
• Aflatoxin G1		1165-39-5
• Aflatoxin G2		7241-98-7
Ochratoxin A	20.	303-47-9

(f) **Residual solvent screening.** Except as otherwise provided in this subsection, a sample and the related population fails quality control testing for residual solvents if the results exceed the limits provided in the table below. Residual solvent results of more than 5,000 ppm for class three solvents, 50 ppm for class two solvents, and 2 ppm for any class one solvents as defined in *United States Pharmacopoeia USP 30 Chemical Tests / <467> - Residual Solvents (USP <467>)* not listed in the table below fail quality control testing. When residual solvent screening is required, certified labs must test for the solvents listed in the table below at a minimum.

Solvent	µg/g	ppm (simplified)	CAS #
Acetone	$5.0 * 10^3$	5000	67-64-1
Benzene	2.0	2	71-43-2
Butanes (Sum of Isomers)	$5.0 * 10^3$	5000	
• n-butane			106-97-8
• 2-methylpropane (isobutane)			75-28-5
Cyclohexane	$3.9 * 10^3$	3880	110-82-7
Chloroform	2.0	2	67-66-3
Dichloromethane	$6.0 * 10^2$	600	75-09-2
Ethanol	$5.0 * 10^3$	5000	64-17-5
Ethyl acetate	$5.0 * 10^3$	5000	141-78-6
Heptanes (Single Isomer)	$5.0 * 10^3$	5000	
• n-heptane			142-82-5
Hexanes (Sum of Isomers)	$2.9 * 10^2$	290	
• n-hexane			110-54-3
• 2-methylpentane			107-83-5
• 3-methylpentane			96-14-0
• 2,2-dimethylbutane			75-83-2
• 2,3-dimethylbutane			79-29-8
Isopropanol (2-propanol)	$5.0 * 10^3$	5000	67-63-0
Methanol	$3.0 * 10^3$	3000	67-56-1
Pentanes (Sum of Isomers)	$5.0 * 10^3$	5000	
• n-pentane			109-66-0
• methylbutane (isopentane)			78-78-4
• dimethylpropane (neopentane)			463-82-1
Propane	$5.0 * 10^3$	5000	74-98-6

Solvent	µg/g	ppm (simplified)	CAS #
Toluene	$8.9 * 10^2$	890	108-88-3
Xylenes (Sum of Isomers)	$2.2 * 10^3$	2170	
• 1,2-dimethylbenzene (ortho-)			95-47-6
• 1,3-dimethylbenzene (meta-)			108-38-3
• 1,4-dimethylbenzene (para-)			106-42-3

(g) **Heavy metal screening.** Heavy metal screening is required for all DOH compliant product as described in chapter 246-70 WAC. Heavy metal screening is optional for non-DOH compliant product; however, heavy metal limits provided below apply to all products. Any product exceeding the provided limits is subject to recall and destruction. The board may conduct random or investigation driven heavy metal screening for compliance. A sample and related quantity of product fail quality control testing for heavy metals if the results exceed the limits provided in the table below.

Metal	µg/g
Arsenic	2.0
Cadmium	0.82
Lead	1.2
Mercury	0.40

(h) **Pesticide screening.** For purposes of pesticide screening, a sample and the related quantity of marijuana is considered to have passed if it meets the standards described in WAC 314-55-108 and applicable department of agriculture rules.

(4) **Required quality control tests.** The following quality control tests are required for each of the marijuana products described below. Licensees and certified labs may opt to perform additional quality control tests on the same sample.

(a) **Marijuana flower.** Marijuana flower requires the following quality control tests:

Product	Test(s) Required
Marijuana flower	1. Water activity testing 2. Potency analysis 3. Foreign matter inspection 4. Microbiological screening 5. Mycotoxin screening 6. Pesticide screening

(b) If marijuana flower will be sold as useable flower, no further testing is required.

(c) **Intermediate products.** Intermediate products must meet the following requirements related to quality control testing:

(i) All intermediate products must be homogenized prior to quality assurance testing;

(ii) For the purposes of this section, a batch is defined as a single run through the extraction or infusion process;

(iii) Marijuana mix must be chopped or ground so no particles are greater than 3 mm; and

(iv) Intermediate products require the following quality assurance tests:

Intermediate Product Type	Tests Required
Marijuana mix	1. Water activity testing 2. Potency analysis 3. Foreign matter inspection 4. Microbiological screening 5. Mycotoxin screening 6. Pesticide screening
Concentrate or extract made with hydrocarbons (solvent based made using n-butane, isobutane, propane, heptane, or other solvents or gases approved by the board of at least 99% purity)	1. Potency analysis 2. Mycotoxin screening 3. Residual solvent test 4. Pesticide screening
Concentrate or extract made with a CO_2 extractor like hash oil	1. Potency analysis 2. Mycotoxin screening 3. Residual solvent test 4. Pesticide screening
Concentrate or extract made with ethanol	1. Potency analysis 2. Mycotoxin screening 3. Residual solvent test 4. Pesticide screening
Concentrate or extract made with approved food grade solvent	1. Potency analysis 2. Microbiological screening 3. Mycotoxin screening 4. Residual solvent test 5. Pesticide screening
Concentrate or extract (nonsolvent) such as kief, hash, rosin, or bubble hash	1. Potency analysis 2. Microbiological screening 3. Mycotoxin screening 4. Pesticide screening
Infused cooking oil or fat in solid form	1. Potency analysis 2. Microbiological screening 3. Mycotoxin screening 4. Pesticide screening

(d) **End products.** All marijuana, marijuana-infused products, marijuana concentrates, marijuana mix packaged, and marijuana mix infused sold from a processor to a retailer require the following quality assurance tests:

End Product Type	Tests Required
Infused solid edible	1. Potency analysis 2. Water activity testing
Infused liquid (like a soda or tonic)	1. Potency analysis
Infused topical	1. Potency analysis
Marijuana mix packaged (loose or rolled)	1. Potency analysis
Marijuana mix infused (loose or rolled)	1. Potency analysis
Concentrate or marijuana-infused product for inhalation	1. Potency analysis

(e) End products consisting of only one intermediate product that has not been changed in any way are not subject to potency analysis.

(5) Useable flower, a batch of marijuana concentrate, or a batch of marijuana-infused product may not be sold until the completion and successful passage of required quality control testing, except:

(a) Licensees may wholesale and transfer batches or quantities of marijuana flower and other material that will be extracted, and marijuana mix and nonsolvent extracts, for the purposes of further extraction prior to completing required quality control testing.

(b) Business entities with multiple locations licensed under the same UBI number may transfer marijuana products between the licensed locations under the same UBI number prior to quality control testing.

(c) Licensees may wholesale and transfer failed batches or quantities of marijuana flower to be extracted pursuant to subsection (6) of this section, unless failed for tests that require immediate destruction.

(6) **Failed test samples.**

(a) Upon approval by the board, failed quantities of marijuana or batches may be used to create extracts. After processing, the extract must pass all quality control tests required in this section before it may be sold, unless failed for tests that require immediate destruction.

(b) Retesting. A producer or processor must request retesting. The board may authorize the retest to validate a failed test result on a case-by-case basis. The producer or the processor requesting the retest must pay for the cost of all retesting.

(c) Remediation. Remediation is a process or technique applied to quantities of marijuana flower, lots, or batches. Remediation may occur after the first failure, depending on the failure, or if a retest process results in a second failure. Pesticide failures may not be remediated.

(i) Producers and processors may remediate failed marijuana flower, lots, or batches so long as the remediation method does not impart any toxic or harmful substance to the useable marijuana, marijuana concentrates, or marijuana-infused product. Remediation solvents or methods used on the marijuana product must be disclosed to:

(A) A licensed processor;

(B) The producer or producer/processor who transfers the marijuana products;

(C) A licensed retailer carrying marijuana products derived from the remediated marijuana flower, lot, or batch; or

(D) The consumer upon request.

(ii) The entire quantity of marijuana from which the failed sample(s) were deducted must be remediated.

(iii) No remediated quantity of marijuana may be sold or transported until quality control testing consistent with the requirements of this section is completed.

(iv) If a failed quantity of remediated marijuana is not remediated or reprocessed in any way after a first failure, it cannot be retested. Any subsequent certificates of analysis produced without remediation or reprocessing of the failed quantity of marijuana will not supersede the original compliance testing certificate of analysis.

(7) **Referencing.** Certified labs may reference samples for mycotoxins, heavy metals, and pesticides testing to other certified labs by subcontracting for those fields of testing. Labs must record all referencing to other labs on a chain-of-custody manifest that includes, but is not limited to, the following information: Lab name, certification number, transfer date, address, contact information, de-

livery personnel, sample ID numbers, field of testing, and receiving personnel.

(8) Certified labs are not limited in the amount of useable marijuana and marijuana products they may have on their premises at any given time, but a certified lab must have records proving all marijuana and marijuana-infused products in the certified lab's possession are held only for the testing purposes described in this chapter.

(9) A certificate of analysis issued by a certified lab for any marijuana product subject to the requirements of this chapter that has not already been transferred to a retail location expires 12 calendar months after issuance.

(10) The board, or its designee, may request that a licensee or a certified lab provide an employee of the board or their designee samples of marijuana or marijuana products, or samples of the growing medium, soil amendments, fertilizers, crop production aids, pesticides, or water for random or investigatory compliance checks. Samples may be randomly screened and used for other quality control tests deemed necessary by the board.

(11) All marijuana products produced, processed, distributed, or sold after the effective date of these rules, must comply with these rules and this chapter; however, postharvest products in the possession of or being processed by a licensee that do not comply with these rules as of their effective date may be sold, distributed, or both within a reasonable period of time, determined by the board.

AMENDATORY SECTION (Amending WSR 17-12-032, filed 5/31/17, effective 8/31/17)

WAC 314-55-1025 Proficiency testing. (1) For the purposes of this ((~~section~~)) chapter, the following definitions apply:

(a) "Field of testing" means the categories of subject matter the laboratory tests, such as pesticide, microbial, potency, residual solvent, heavy metal, mycotoxin, foreign matter, and moisture content detection.

(b) "Proficiency testing (PT)" means the analysis of samples by a laboratory obtained from providers where the composition of the sample is unknown to the laboratory performing the analysis and the results of the analysis are used in part to evaluate the laboratory's ability to produce precise and accurate results.

(c) "Proficiency testing (PT) program" means an operation offered by a provider to detect a laboratory's ability to produce valid results for a given field of testing.

(d) "Provider" means a third-party company, organization, or entity not associated with certified laboratories or a laboratory seeking certification that operates an approved PT program and provides samples for use in PT testing.

(e) "Vendor" means an organization(s) approved by the ((~~WSLCB~~)) board to certify laboratories for marijuana testing, approve PT programs, and perform on-site assessments of laboratories.

(2) The ((~~WSLCB~~)) board or its vendor determines the sufficiency of PTs and maintains a list of approved PT programs. Laboratories may request authorization to conduct PT through other PT programs but must obtain approval for the PT program from ((~~WSLCB or WSLCB's~~)) the board or the board's vendor prior to conducting PT. The ((~~WSLCB~~)) board may

add the newly approved PT program to the list of approved PT programs as appropriate.

(3) As a condition of certification, laboratories must participate in PT and achieve a passing score for each field of testing for which the lab will be or is certified.

(4) A laboratory must successfully complete a minimum of one round of PT for each field of testing the lab seeks to be certified for and provide proof of the successful PT results prior to initial certification.

(5)(a) A certified laboratory must participate in a minimum of two rounds of PT per year for each field of testing to maintain its certification.

(b) To maintain certification, the laboratory must achieve a passing score, on an ongoing basis, in a minimum of two out of three successive rounds of PT. At least one of the scores must be from a round of PT that occurs within six months prior to the laboratory's certification renewal date.

(6) If the laboratory fails to achieve a passing score on at least ((~~eighty~~)) 80 percent of the analytes in any proficiency test, the test is considered a failure. If the PT provider provides a pass/fail on a per analyte basis but not on the overall round of PT the lab participates in, the pass/fail evaluation for each analyte will be used to evaluate whether the lab passed ((~~eighty~~)) 80 percent of the analytes. If the PT provider does not provide individual acceptance criteria for each analyte, the following criteria will be applied to determine whether the lab achieves a passing score for the round of PT:

(a) +/- 30% recovery from the reference value for residual solvent testing; or

(b) +/- 3 z or 3 standard deviations from the reference value for all other fields of testing.

(7) If a laboratory fails a round of PT or reports a false negative on a micro PT, the laboratory must investigate the root cause of the laboratory's performance and establish a corrective action report for each unsatisfactory analytical result. The corrective action report must be kept and maintained by the laboratory for a period of three years, available for review during an on-site assessment or inspection, and provided to the ((~~WSLCB or WSLCB's~~)) board or the board's vendor upon request.

(8) Laboratories are responsible for obtaining PT samples from vendors approved by ((~~WSLCB or WSLCB's~~)) the board or the board's vendor. Laboratories are responsible for all costs associated with obtaining PT samples and rounds of PT.

(9) The laboratory must manage, analyze and report all PT samples in the same manner as customer samples including, but not limited to, adhering to the same sample tracking, sample preparation, analysis methods, standard operating procedures, calibrations, quality control, and acceptance criteria used in testing customer samples.

(10) The laboratory must authorize the PT provider to release all results ((~~used for certification and/or remediation of failed studies to WSLCB or WSLCB's~~)) at the same time, whether pass or fail, to the laboratory and the board, or the board's vendor.

(11) The ((~~WSLCB~~)) board may require the laboratory to submit raw data and all photographs of plated materials along with the report of analysis of PT samples. The laboratory must keep and maintain all raw data and all photographs of plated materials from PT for a period of three years.

(12) The ((~~WSLCB~~)) board may waive proficiency tests for certain fields of testing if PT samples or PT programs are not readily available or for other valid reasons as determined by ((~~WSLCB~~)) the board.

(13)(a) The ((~~WSLCB~~)) board will suspend a laboratory's certification if the laboratory fails to maintain a passing score on an ongoing basis in two out of three successive PT studies. The ((~~WSLCB~~)) board may reinstate a laboratory's suspended certification if the laboratory successfully analyzes PT samples from ((~~a WSLCB or WSLCB's~~)) the board or the board's vendor approved PT provider, so long as the supplemental PT studies are performed at least ((~~fifteen~~)) 15 days apart from the analysis date of one PT study to the analysis date of another PT study.

(b) The ((~~WSLCB~~)) board will suspend a laboratory's certification if the laboratory fails two consecutive rounds of PT. ((~~WSLCB~~)) The board may reinstate a laboratory's suspended certification once the laboratory conducts an investigation, provides the ((~~WSLCB~~)) board a deficiency report identifying the root cause of the failed PT, and successfully analyzes PT samples from a ((~~WSLCB or WSLCB's~~)) board or board's vendor approved PT provider. The supplemental PT studies must be performed at least ((~~fifteen~~)) 15 days apart from the analysis date of one PT study to the analysis date of another PT study.

(14) If a laboratory fails to remediate and have its certification reinstated under subsection (13)(a) or (b) of this section within six months of the suspension, the laboratory must reapply for certification as if the laboratory was never certified previously.

(15) A laboratory that has its certification suspended or revoked under this section may request an administrative hearing to contest the suspension as provided in chapter 34.05 RCW.

Washington State
Liquor and Cannabis Board

Notice of Permanent Rules

Regarding Amendment to WAC 314-55-101 – Quality assurance sampling protocols; WAC 314-55-102 – Quality assurance testing; and WAC 314-55-1025 – Proficiency testing.

This concise explanatory statement concerns the Washington State Liquor and Cannabis Board's (WSLCB) adoption of amendments to WAC 314-55-101, WAC 314-55-102, and WAC 314-55-1025.

The Administrative Procedure Act (RCW 34.05.325(6)) requires agencies to complete a concise explanatory statement before filing adopted rules with the Office of the Code Reviser. The concise explanatory statement must be provided to any person upon request, or from whom the WSLCB received comment.

The WSLCB appreciates and encourages your involvement in the rule making process. If you have questions, please contact Jeff Kildahl, Policy and Rules Coordinator, at (360) 664-1781 or e-mail at rules@lcb.wa.gov.

Background and reasons for adopting these rules:

In early 2018, several stakeholders, including medical marijuana patients, consumers, and licensees, urged WSLCB to require producers and processors to test adult use marijuana for pesticides and heavy metals. In August 2018, the WSLCB began the initial stages of rule development regarding marijuana quality control and product requirements. Among the rule changes being considered were whether all marijuana products be tested for pesticides and heavy metals. These partners asserted that such a move, already adopted in other states, would inspire confidence among consumers, increase access to medically compliant products, and bolster sales.

There is no product testing guidance available to the WSLCB or any other state agency regulating marijuana from federal agencies who set standards for agriculture, food, and other products because marijuana remains classified as a Schedule I drug, and federally illegal. This presents regulatory challenges to the WSLCB, regulators throughout the country, and the industry since there is limited funding to support research on how marijuana tainted with potential toxins affects humans. However, while the possible health impact of consuming marijuana products with unapproved pesticides is an emerging area of research, the overarching goal of the WSLCB is to protect public health and safety, and to assure that all products sold within the I-502 market are safe for all consumers.

Existing testing requirements for adult use marijuana were intended to safeguard products for sale and list potency levels. However, there has not been a requirement for Washington recreational marijuana products to be tested for pesticides or heavy metals, and although not precluded from doing so, many producers and processors did not test for either. Based on a number of elements, including consumer concern and national best practices, it became evident

that mandatory pesticide testing for all marijuana products produced, processed, and sold in Washington State was necessary, and that random or investigation driven heavy metal testing conducted by the WSLCB was also needed.

Adoption of these rules is to needed to require that all marijuana products produced and sold in Washington State are tested for pesticides, and to allow the WSLCB to conduct randomized or investigation driven testing for heavy metals in marijuana products. In order to meet potential demand for pesticide testing, there are currently a total of five marijuana testing labs in Washington State capable of testing for the full suite of I-502 tests, along with pesticides. With the recent increase in hemp-derived delta-8, delta-9, and other unregulated products entering the I-502 market, it is important at this time to require pesticide testing and random or investigation driven heavy metal testing for adult use marijuana products to protect public health and safety.

Rulemaking history for this adopted rule:

CR 101 – filed as WSR #18-17-041.
CR 102 – filed December 8, 2021 as WSR #22-01-055.
Public hearing held February 2, 2021.

The effective date of these rules is April 2, 2022.

Public comment received on the rule proposal:

See Attachment A – Public Comment

Changes from Proposed Rules (CR-102) to the Rules as Adopted:

WAC 314-55-102 is amended to include a new subsection (11) as follows:

(11) All marijuana products produced, processed, distributed or sold after the effective date of these rules must comply with these rules and this chapter, however, post-harvest products in the possession of, or being processed by a licensee that do not comply with these rules as of their effective date may be sold, distributed or both within a reasonable period of time determined by the board.

This non-substantive amendment was added to allow for a transition period for rule implementation.

Attachment A - Public Comment—Marijuana Quality Control Testing

Written Comments Received Regarding CR 102 filed as WSR 22-01-055 and Oral Testimony Received at Public Hearing December 8, 2021

	Source	Commenter	Date Received	Comment and Response	Themes
1	*Email*	Jeff Merryman	12/08/2021	I was wondering what heavy metals will be tested for because with everything that happened during the Green Run their at Hanford with the heavy metal releasing on unsuspected humans. I honestly tell people not to buy our cannabis products in this state especially anything that's grown on the east side of the state. I know Strontium 90 has a really long half-life and it is found in the soils in Washington State. My question is can that also be added to that heavy metal panel. It has been proven in other countries that the cannabis plant can pick it up. I also hope Iodine-131 will be included in that heavy metal panel. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. The proposed rule includes random testing for mercury, lead, arsenic, and cadmium. We will note your suggestion for testing for radioactive elements. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Testing for heavy metals
2	*Email*	Dan Rasmussen	12/08/2021	As an I 502 licensed producer processor We are required to do all of the work to produce and package ready for sale to the public products. The retailers then decide whether we live or die by deciding who to buy from and most play favorites and take care of their friends and they take roughly one third of the money for said product while doing nothing along the way for that money. Then we have the state taking their third for doing absolutely nothing. The system is terrible for producer processors and great for everyone else involved. Now to stack another tax on to our backs is absolutely bs. The costs of pesticide tests should be paid by retailers or lcb again a system will be set up where people are allowed to cheat by selecting what samples are tested. The only way this testing works is if samples are pulled from packaged product at the retailers and then if it's dirty shut them down. If each supplier were required to be randomly tested by retailers or an lcb team it would fix the problem. If companies knew their products would be pulled and tested they would not send it out in the first place but left to send it in the way it's set up now does nothing for public safety. Cheaters will cheat and the rats cannot be allowed to guard the cheese. If after all these years companies are using unapproved or over the limit of pesticides they should be shut down with no questions asked. Please consider my proposal and realize that any extra money in the industry is made by the ones who do the least and that's not fair or right. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. Sampling by LCB would present operational and infrastructure challenges, including costs, insurance, additional vehicle purchase, processing, and other logistical concerns, and would require legislative action. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Cost of pesticide testing, sampling, random testing of products from store shelves
3	*Email*	Jay Burns, Treeline Analytics	12/13/2021	Regarding the proposed changes filed in WSR 22--01-055, Quality Control Standards: Could you please clarify and define STEC? What strains are included? What type of STEC testing will be required to meet this change? For example, will it require genetic verification on all samples (PCR)? **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. Regarding your questions , would like for the laboratories to test for shiga toxin (verotoxin). Typically this is done with enzyme immunoassays, however that is not a requirement. Genetic verification has not and will continue to not be a requirement for the testing within I-502. Presumptive positives are enough for our testing needs. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Microbial testing

4	*Email*	Sherman Hom, Medical Genomics	12/20/2021	Since these adopted microbial testing rules (bile tolerant Gram negative bacteria, Salmonella species [Sal], and shiga toxin producing E.coli [STEC]) were adopted this month, do you feel that the Liquor and Cannabis Board would consider modifying this rule to testing the 6 human pathogens that have been detected in cannabis. The 6 pathogens are Sal, STEC, and the 4 pathogenic Aspergillus species. CA, VT, MT, and OR have either adopted or proposed rules requiring testing for these 6 pathogens. I thank you for your time and consideration. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We appreciate your interest in microbial testing. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Microbial testing
5	*Email and attached letter*	Sherman Hom, Medical Genomics	12/20/2021	I sent this letter that was forwarded to you about 2 months ago. It was not until Nov and Dec 2021 that VT, MT, and OR proposed testing for these 6 pathogens and having no testing for total counts, because a result does not give any real information that any pathogens are in the cannabis sample. I want to confirm that this letter will also be considered, because it provides our reasons for specific pathogen tests vs. total tests. I thank you for all of your time and consideration. As industry leaders in cannabis and pathogen genomics, we have spent decades working with quantitative polymerase chain reaction (qPCR) and culture-based methods for the detection of microorganisms. We are experts in the field with over 40 patents related to PCR and DNA sequencing based methods for detecting microorganisms. Kevin McKernan, Chief Scientific Officer at Medicinal Genomics Corporation (MGC) managed the Research and Development team for the Human Genome Project at the Whitehead Institute of MIT. He has over 45,356 citations related to his work in this field. Our scientists recommend the microbial testing specifications that will ensure that cannabis manufactured products are safe for patients and consumers. Due to our concerns for public health, we feel that the WA Cannabis Science Task Force Steering Committee Microbial Workgroup should consider modifying your present required microbial testing of cannabis to reflect ongoing efforts at the AOAC, USP, CDC, and FDA, which are consistent with our findings at MGC. The presence of microorganisms is common in natural products, such as cannabis flowers. One must be able to differentiate between harmless microbes ubiquitous in nature and those that are human pathogens that have contaminated the cannabis plant and/or manufactured products. Examples of human pathogens that have been detected in cannabis are Shiga toxin producing *E. coli* (STEC), *Salmonella* species, *Aspergillus flavus, A. fumigatus*, *A. niger*, and *A. terreus*. Current required tests for microbial contamination in states that have medical and/or adult-use cannabis programs vary among the states. Many states require a combination of some of the following tests: total bile-tolerant Gram-negative bacteria count (BTGN), total aerobic microbial count (TAMC), total yeast and mold count (TYM), total coliform count, and total *E. coli* count, STEC, *Salmonella* spp., and the 4 species of *Aspergillus* (see above) with various action levels for each test and each cannabis product type. All microbial tests have action levels as colony forming units (cfu/g), which is the number of colonies that grow on the surface of an agar medium plate. On the other hand, other states, such as California, only require species specific tests for STEC, *Salmonella* spp., *Aspergillus fumigatus*, *A. flavus*, *A. niger*, and *A. terreus* with an action level of zero (0) cfu/g of inhalable product and STEC & *Salmonella* spp. with an action level of zero (0) cfu/g of non-inhalable product. The Washington Liquor and Cannabis Board's conceptual draft rules designed for discussion regarding cannabis quality control testing (dated 10/1/21) indicated the following: (d) Microbiological screening. The sample and the related population fails quality control testing for microbiological screening if the results exceed the following limits: Unprocessed Plant Material Colony Forming Unit per Gram (CFU/g) Bile Tolerant Gram Negative (BTGN) 1.0 * 104 Shiga toxin-producing Escherichia coli (STEC) <1	Microbial testing

				Salmonella spp. <1 Processed Plant Material Colony Forming Unit per Gram (CFU/g) Bile Tolerant Gram Negative (BTGN) 1.0 * 103 Shiga toxin-producing Escherichia coli (STEC) <1 Salmonella spp. <1 Our primary point is that total microbial count tests ("indicator tests"), such as BTGN bacteria **do not** test directly for the presence of species specific human pathogens. The American Herbal Pharmacopoeia's *Cannabis* Inflorescence *Cannabis* spp. monograph [1] states that total microbial count tests with their corresponding action levels **must never** be used to pass or fail a cannabis sample. The total count result **does not** provide any information on the presence of any pathogenic microorganisms in the cannabis sample, which may cause harm to patients and consumers. Therefore, Medicinal Genomics **recommends** that the WA Cannabis Science Task Force Steering Committee Microbial Workgroup consider modifying the required microbial testing rules to include required microbial testing for medical and adult-use cannabis and cannabis products to include the pathogen specific tests. These six tests are: 1. *Salmonella* species 2. Shiga-toxin producing *Escherichia coli* (STEC) 3. *Aspergillus flavus* 4. *Aspergillus fumigatus* 5. *Aspergillus niger* 6. *Aspergillus terreus* Since many medical cannabis patients are ill; especially those that are immunocompromised, the action levels for all six tests should be "None detected/gram" for inhalable products and only numbers 1 and 2 above for non-inhalable products. Twelve (12) states (AK, AZ, CA, CO, FL, HI, IA, MI, MO, OK, NV, and SD) have either required the tests to detect the human pathogens listed above or have drafted regulations to add or replace Total Count tests with the tests to detect pathogens. Medicinal Genomics also recommends that the the required microbial testing for medical and adult-use cannabis and cannabis products rules should include a statement concerning allowable methods to read: 1. A validated method using guidelines for food and environmental testing put forth by the USP, FDA, and AOAC Appendix J and cannabis as a sample type; or 2. (i) Another approved AOAC, FDA, or USP validated method using cannabis as a sample type." OTE: "Another approved AOAC, FDA, or USP validated method using cannabis as a sample type" may include molecular methods, such as qPCR." The reasons for this recommendation are outlined below. **Currently there are limited AOAC, FDA, or USP approved species specific pathogen testing methods for cannabis.** Medicinal Genomics released the first version of our SenSATIVAx® (DNA extraction) and PathoSEEK® (qPCR assay) Manufacturer Validation Document in 2017. These method validations use cannabis as the sample type. At that time, there were no official guidelines published by any regulatory body describing how to validate a method for detecting microbes in the presence of a cannabis matrix. Due to this lack of available guidelines in the cannabis industry, our scientific team referenced guidelines for food and environmental testing put forth by the USP, FDA, and AOAC Appendix J. We continually add data to this document as we release new assays or make improvements to current assays. We are currently on version 31 of this document[2]. In addition, MGC's methods are currently going through additional validation according to AOAC's Standard Method Performance Requirements (SMPRs). AOAC has released 3 SMPRs for species specific testing for the species specific pathogens listed above (see #1-3 below). 1. Detection of *Aspergillus* in Cannabis and Cannabis Products	

				https://www.aoac.org/wp-content/uploads/2019/10/SMPR-2019_001.pdf 2. Detection of *Salmonella* species in Cannabis and Cannabis Products https://www.aoac.org/wp-content/uploads/2020/07/SMPR-2020_002.pdf 3. Detection of Shiga toxin-producing *Escherihia coli* in Cannabis and Cannabis Products https://www.aoac.org/wp-content/uploads/2021/02/SMPR-2020_012.pdf Medicinal Genomics is a member of **AOAC's Cannabis Analytical Science Program (CASP) Microbial Contaminants Working Group**. The goal and objectives of this working group are to ● Develop Standard Method Performance Requirements (SMPR) for cannabis and hemp ● Extend a Call for Methods for each of the completed SMPRs ● Empanel an Expert Review Panel to review candidate methods ● Deliver consensus-based validated Performance Test Methods (PTMs) & Final Action Official Methods for the cannabis industry **NOTE:** Medicinal Genomics has a single AOAC Certified qPCR PTM for the detection of the 4 *Aspergillus* species, which was approved on August 10, 2021 and will have a single AOAC Certified qPCR PTM for the detection of *Salmonella* spp. & STEC by November 2021. The sample types for the Asp test are flower & infused products and will expand to include oils/concentrates & hemp by end of 2021. Moreover, the sample types for the Sal/STEC test will be flowers, oils, chocolates, and hemp. The primary advantage of using qPCR detection assays are that they are designed to identify unique specific DNA sequences either shared by an entire "group" of bacteria, such as all *Salmonella* species or a specific genus and species, such as STEC or the 4 different pathogenic *Aspergillus* species. If the unique sequences are present, then the qPCR test will detect it. Therefore, a qPCR test is very specific, very sensitive, and possesses a rapid turnaround time (6 hours) *vs.* plating methods that are less specific, less sensitive, and has a very slow turnaround time of days for colonies to form on a plate. Moreover, MGC has developed a method to remove the DNA from dead cells by using a DNA nuclease, incubation, and nuclease inactivation step before amplification to detect any DNA from live pathogens. [3] Furthermore, there are additional major disadvantages of using plating methods to detect species specific bacterial and fungal pathogens. ● The cannabinoids, which represent 10-20% of the cannabis flower by weight, have been shown to have antibiotic activity. Antibiotics inhibit the growth of bacteria in plating methods. *Salmonella* and STEC bacteria are very sensitive to antibiotics, which may lead to a false negative result. ● Plating methods cannot detect endophytes, which are fungi that live a part or all of their life cycle inside a plant. Examples of endophytes are the species specific *Aspergillus* pathogens and *Fusarium*. Methods to break open the plant cells to access these fungal endophytes for plating methods also lyses these fungal cells (killing these cells in the process). Therefore, these fungal endophytes will not be able to form colonies in a plating method. ● Selective media for fungal plating methods, such as Dichloran Rose-Bengal Chloramphenicol (DRBC) reduces fungal growth; especially *Aspergillus* by 5-fold. This may lead to a false negative result for this pathogen. In other words, although DRBC medium is typically used to reduce bacteria; it comes at the cost of missing 5 fold more yeast and molds than Potato Dextrose Agar (PDA) + Chloramphenicol or molecular methods. Please see study results from the AOAC emergency response validation. [4] References 1. American Herbal Pharmacopoeia's *Cannabis* Inflorescence *Cannabis* spp. Monograph https://herbal-ahp.org/online-ordering-cannabis-inflorescence-qc-monograph/ 2. MGC Validation Document https://1280717.app.netsuite.com/core/media/media.nl?id=5910362&c=1280717&h=6e4d1cce	

				15d1eae41733&_xt=.pdf&fcts=20191014094610&whence= 3. Solving qPCR's Live-Dead Problem https://www.medicinalgenomics.com/solving-the-live-dead-problem/ 4. Whole genome sequencing of colonies derived from cannabis flowers & the impact of media selection on benchmarking total yeast & mold detection tools: https://f1000research.com/articles/10-624 **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We appreciate your information and letter regarding microbial testing. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
6	*Email*	Jeff Merryman	12/30/2021	I have another question for you I was reading an article about benzene contamination in a lot of products out on the open market for personal goods. Some of the studies show that it most likely comes true butane and since the cannabis market uses a lot of butane with their extraction does that potentially lead to benzene in extracted materials that are being sold on our cannabis regulated market? As I'm sure you're aware benzene should not be in any human product because it increases cancer risk by nine times or more and there's no acceptable levels. Is there a way for LCB to test this because if processors are creating a product that has benzene in it. It kind of goes against everything that the LCB stands for about protecting the people that buy our products. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. The current rules and the proposed CR-102 rules both require testing for benzene along with other residual solvents in WAC 388-55-102. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Residual solvent action levels (benzene)
7	*Email*	Sarah Self, Seattle Bubble Works	1/03/2022	As a processor in Washington state we understand the reasons why mandatory pesticide testing would be a good thing to make sure the products entering the markets are safe for consumption. However, the cost associated with requiring this testing on every single lot would be enormous and would jeopardize our ability to function as a business. Our margins are already razor thin and our ability to pass on costs to our retail partners is basically non-existent, if we raise prices in this state we lose business, plain and simple. This requirement would also cause an incredible backlog and delay in the time it takes to get product test results back because of the extreme lack of labs ability to conduct this type of testing and the length of time it takes to actually get the tests results back for pesticides already. When every single lot in the state has to be tested I imagine it could take what is currently a 2-3 days turnaround time and force it into a one month or more turnaround time, easily. That business model would absolutely not work for us at all, we have such limited cash flow that we have to receive the material we use for processing and get it sold and back out the door within 1 to 2 weeks to keep the cash flowing to be able to buy more material. So, if we had to wait one month and had to pay significantly more for testing I think that could potentially put us and a large number of other small to midsize companies out of business. If your goal is to further reduce competition in the market and further consolidate ownership so that only a few giant "Wal-Mart" or "Amazon" type companies remain, this rule would quickly accomplish that to the detriment of thousands of employees of mom and pop run businesses in our state, as there would be mass layoffs as companies are forced to close their doors or sell out. The only compromise I can see being realistic and fair is for the LCB to conduct pesticide testing at every facility maybe once every 3 or 6 months or randomized testing for pesticides to ensure compliance rather than placing all of this massive financial burden on already struggling businesses. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Cost of pesticide testing, possible testing delays/backlog, periodic or random pesticide testing to be conducted by LCB.

8	*Email*	John Kingsbury	1/04/2022	I have a concern. When "safe and tested" pesticide and heavy metal testing ever become a reality, will there be the resources to actually enforce it? As we have experienced, rules without enforcement do not amount to anything (until neglect turns it into a crisis). It seems to me that what we do not need is yet another thing that exists on paper, but not in reality. Let me explain why this is on my mind today. Perhaps six or seven months ago, I filed a complaint, the only QA complaint I have ever filed (though not the only failed test results I have received), based upon these test results . This sample came from a product with "no-pesticides" and "organic" proudly printed on the label. A few weeks back, during the same day that Chair Postman was riding around with enforcement, I was told: 1. That enforcement had been busy dealing with D8, or some other thing. 2. That the processor was already aware of the situation 3. That the processor had issued a recall. 4. That enforcement would follow-up some day. Having seen this product continue to be widely stocked, I purchased a couple more samples. Yesterday I received new lab results. It is the same stuff -still sitting on shelves. While shuffling through some lab printouts, I noticed this product shares eerily similar test results profile with two other unregulated products purchased at farmers markets. So the reason I bring up adequate enforcement resources is: given that testing is currently on the honor system, for the most part, and given that I have only ever submitted one complaint -that does not seem to have been resolved - I am asking myself what the enforcement situation will look like when testing is no longer on the honor system, and there will be many more documented violations to deal with, and hopefully to follow-up on. I am asking myself whether that will turn into another situation where we have something on paper, but not in reality because the enforcement budget does not fit the new workload. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. Under the adopted rule amendments, all marijuana intermediate products (including usable flower and concentrates sold as end products or added as an ingredient to end products such as edibles) must pass pesticide testing in addition to the I-502 panel of tests before they can be sold into I-502 stores. Heavy metal testing under the proposed rules would be conducted by the LCB on a randomized or investigation-driven basis. Marijuana that does not pass the pesticide testing would not be eligible for remediation and would have to be destroyed. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide action levels, testing products from store shelves, sample collection
9	*Email*	Jeff Merryman	1/05/2022	Thank you for getting back to me and pointing me in the direction of the benzene testing that we already have. I don't know if I sent you any links to the studies about radioactive contamination being cleaned up by the cannabis plant but here's some links so that way you have something to reference. https://www.ijehe.org/article.asp?issn=2277-9183;year=2012;volume=1;issue=1;spage=17;epage=17;aulast=Hoseini https://sensiseeds.com/en/blog/hemp-decontamination-radioactive-soil/ Google scholar has some good information also. The only problem with finding research in the US is the United States is about 30 or 40 years behind in agricultural So most of the research on the subject is done outside of our borders. Knowing that Hanford is the dirtiest site in the world and some of the declassified documents showed their secret releases of heavy metals onto unsuspecting civilians causes concerns of heavy metal contamination in Eastern Washington. Especially with some of those reports stating that they released it into the wind to see how far it went. They estimate the most affected area was 40 miles wide by 200 miles long. They did get some testing that said it reached as far north as Spokane and as far south as kettle falls Oregon. Here's a quick link about the Green Run there at Hanford https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=green+run+hanford&oq=green+run+#d=gs_qabs&u=%23p%3DMcnyJfuLa6kJ I would like to thank you for bringing my concerns up to the board. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. Thank you for the additional information about the radioactive elements. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Testing for heavy metals, and bioaccumulation of radioactive elements
10	*Email*	Micah Sherman, Raven Grass	1/05/2022	I wanted to let you know that I was following along with the rule making process throughout. It was a very good proposal that I am glad to see in place. Thoughtfully informed and well communicated throughout the process.	Quality control testing rule process

				Well done and thank you. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. Thank you for your feedback on this rule process. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
11	*Email*	John Kingsbury	1/05/2022	I understand what the proposed rules say. And I understand that your only job is to draft rules, not to conduct enforcement. I also understand that with self-selection comes chicanery. My question was more about enforcement of those rules. I think it is important to keep in the back of our heads that some percentage of licensees came from an environment, pre 502, where skirting the rules was sort of the business model that stuck as a habit for some. Let's call it a cultural issue. So I am at least mentioning the issue of enforcement of the new rules. because, while I do not believe screening 12,000 samples will create 32 times as much demand for enforcement as screening 375 samples, I think it will place a lot of economic pressures on farms that are pushing non-compliant material through the system now, and I think, once all of the non-compliant material being converted into concentrates now is diverted from the path of least resistance, that adds to the financial pressure on those farms, and I am not sure that pressure can be totally relieved by out-of-state diversion alone, or by diluting traceability volume alone. I am comfortable that there are many more non-compliant products in the system than can be absorbed by those practices. And, while I am all for the dirtiest farmers failing first, it has been my experience that people under severe financial pressure become resourceful. And that causes me to ask about enforcement. I think it would be the absolute height of folly to assume that, because products are tested at the front end, that enforcement will just sort of take care of itself and that there will not be a bunch of collateral enforcement issues. And while folly has not infrequently been the order of the day when it comes to schemes for regulating cannabis in Washington State, I am asking a proactive question. Any unintended consequences that may appear from putting pressure on the enormous supply of non-compliant products that are currently moving through the system are unlikely to resolve themselves simply because Garza gets up in front of CANNRA or industry organizations and proclaims "We are doing a great job". Reality does have a way of showing up uninvited and bitch-slapping the best salesmanship job upside its head. So I am asking the question -in order to be proactive, rather than being reactive. And the point that I was trying to make with the example I brought up is: If, as with my one known violation that was documented six months has resulted in a bunch of non-compliant stock still sitting on store shelves today, with a vague promise to follow-up some time, and an unfulfilled promise by the vendor to recall that promise, if that one issue is an enforcement problem, what sort of enforcement problem might result if there is a sudden change in the course of the river of non-compliant product flowing freely today. It seems like a fair question. Thanks for your work on these important rules. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. Under the adopted rule amendments, all marijuana intermediate products (including usable flower and concentrates sold as end products or added as an ingredient to end products such as edibles) must pass pesticide testing in addition to the I-502 panel of tests before they can be sold into I-502 stores. Heavy metal testing under the proposed rules would be conducted by the LCB on a randomized or investigation-driven basis. Marijuana that does not pass the pesticide testing would not be eligible for remediation and would have to be destroyed. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Enforcement of pesticide action levels
12	*Email*	John Kingsbury	1/15/2022	We have a new winner for highest level of total molds. Most states set a limit on total molds at 10,000 CFUs. Washington has no such limits. This sample came out at 20 times that. I bought this sample and had it tested because some employees of a producer reached out to me and told me they felt their workplace was making them ill. This is the result. My advice to them was to immediately stop consuming company product, document the problem, and contact Labor and Industries if they develop breathing problems. I was told by their employees that they had requested to take a day and sanitize the growing areas because there was visible mold in the garden areas. They relayed to me that the boss's response was that they did not have time and product would not be tested for total molds anyway, so the product should pass. So, since LCB (and now DOH) has decided that anything that a patient buys is "medical" product, so this is medical product. "Safe and tested" -yep. John Kingsbury https://drive.google.com/file/d/17hmTQ-oXR8LsuL1g_QgNAaKAVsaMwwAL/view?usp=sharing	Testing for samples from store shelves for mold

				WSLCB response: The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have noted your suggestion. There is currently no action level established for mold. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
13	*Email*	John Kingsbury	1/20/2022	To be clear. The point I was attempting to make was not that there was a sample with high mold levels that still passed state standards, but that this is a routine problem that producers allow because they know they will pass. **We need to restore a total mold standard -especially if LCB persists in the view that whatever toxic waste a store sells to a patient is medical product.** My memory is that, like other states, Washington once had a total mold limit (10,000 CFUs, I believe), but, because too many samples were failing LCB did what LCB often does, which was to lower the bar by removing the requirement. Here are some other samples -again, with sickening levels of mold, yet passing state standards. https://drive.google.com/file/d/1CupA6DyPX3wvMz0sdmLsLexHYW8Avbgj/view?usp=sharing https://drive.google.com/file/d/1cGJiXabI2oWa3gR4b9VIG9kuyyp1NuU1/view?usp=sharing https://drive.google.com/file/d/1B8eOrcIl25S16NDQnqVrRvp4kNXOntEq/view?usp=sharing John Kingsbury **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. Thank you for sending your suggestions for establishing a testing action level for mold. I will include them in the rulemaking package for consideration and in the rule file. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Supports action levels for mold
14	*Email*	John Kingsbury	1/20/2022	You wrote that the rules do not permit for remediation, but the way I am reading the proposal, remediation does seem to be permitted under Section 6. What am I not understanding? I think remediation is a good alternative because, after so many years of no testing, many producers have become comfortable producing contaminated product, that the option of remediation, though not profitable, would provide an alternative to dumping that product into the illicit market once product begins failing. I am confused between the difference between what you wrote and what seems to be written in the CR 102. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We apologize for the confusion. Under the adopted rules in WAC 314-55-102 (6) (c), in the third sentence, remediation is not permitted for pesticide failures. The third sentence reads: "Pesticide failures may not be re-mediated." **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Remediation of failed product
15	*Email*	*Lee P. Duncan, Manna Production*	1/26/2022	I am a small Tier 1 producer/processor. The proposed rule CR-102 regarding pesticide testing and the 50lb lot sizes will financially devastate my small business. I am writing to you to oppose implementation of the current CR-102 regarding pesticide testing, because the lot size increases will lead to significantly higher testing costs as written. **I will never be able to produce a 50lb loft but will pay the same costs for small 5 to 10lb lots!** I am not opposed to required pesticide testing, but these cost cutting measures are anything but cost cutting and will result in much higher costs per test, which disproportionately affects the smaller producer/processors. The Tier 1 farms are already at a disadvantage to the larger farms and the increase cost of pesticide testing as it is currently written will only put us out of business and eliminate the few "Mom and Pop" farms left in the State! Please, please, please think of how this will impact our families. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing costs affecting Tier 1 producers / processors

16	*Email*	Joe Lima, Novo Dia Farms	1/26/2022	I am writing to you to oppose implementation of the current CR-102 regarding pesticide testing, because the lot size increases will lead to significantly higher testing costs as written. These cost cutting measures are anything but cost cutting and will result in much higher costs per test, which disproportionately affects the smaller producer/processors. Beyond that, forcing licensees to pesticide test every lot is an extreme financial burden in an already difficult market we are facing in WA. Realistically, The WSDA should be the entity dealing with this burden as they regulate pesticides in every other crop in WA. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing costs affecting small producers / processors
17	*Email*	Leslie Wang, SmartLeaf LLC	1/26/2022	I am writing to you to oppose implementation of the current CR-102 regarding pesticide testing, because the lot size increases will lead to significantly higher testing costs as written. I am not opposed to required pesticide testing, but these cost cutting measures are anything but cost cutting and will result in much higher costs per test, which disproportionately affects the smaller producer/processors. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing costs affecting small producers / processors
18	*Email*	Jason Minnick, Washington Tower Farm	1/26/2022	I am writing to oppose implementation of the current CR-102 regarding pesticide testing, because the lot size increases will lead to significantly higher testing costs as written. I am not opposed to required pesticide testing, but these cost cutting measures are anything but cost cutting and will result in much higher costs per test, which disproportionally effects the smaller producer/processors. The rule as written would create an unfair competitive advantage for larger producer processors, and place an undue burden of testing expenses on smaller producer processors. We fully support mandatory testing for pesticides, and we do believe that it is in the best interest of the consumer, and the cannabis industry; however, this rule change does not provide a fair and level playing field. The overall negative impact on smaller producer processors would outweigh any benefits this rule seeks to provide. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing costs affecting small producers / processors
19	*Email*	Kyle Hubly, Lester Farms	1/26/2022	I am writing you as the president of a mid sized tier 2 producer/processor with average revenue to voice severe concerns with implementation of the current CR-102 for pesticide testing. We are grateful that the WSLCB is finally addressing this long-held and universal concern from all parties inside our industry, our consumers, and medical patients. However, the mechanisms for implementing this rule as written will result in fundamental economic changes that will not equitably pass through to consumers as hoped, and unavoidably result in significant increases in testing costs for everyone that isnt a very large producer processor. My business sent testing out for approximately 30 lots in 2021, none of which could have met the required threshold of 50 lbs to effectively mitigate the cost increases that this bill will impose by statute, let alone by very practical market based forces. I can only speak for my business when I say that our direct cost increases will be dramatically in excess of a "minor cost" as detailed in the CR-2 and as defined by RCW19.85.020. It appears that the rules committee has not consulted adequately with accredited labs, or properly weighed relevant feedback from them when considering this with respect to cost mitigation. It is plain and obvious that labs will have less billable tests to cover their same overhead and fixed costs, which will unavoidably result in additional market based cost increases that arent even mentioned in the committee's efforts, let alone addressed.	Pesticide testing costs affecting small producers / processors

				The cost reduction mechanisms considered by the committee and listed in the proposed rule offer no real relief for small farms, which borders on disrespect. The reason for offering a reduction in the required number of grams per test as a solution when it is not even close to a material cost for us makes no sense. This is contrasted to say, the detriment resulting from having to produce 50lbs of a single strain in order to achieve cost efficiencies of scale on our testing, which is monumental. Your proposed mitigation strategies will help only the very largest of farms, which completely undermines the duty your agency has to attempt to safeguard the 99% of licensees (by your own figures) who will be disproportionately harmed by this rule in furtherance of equitable reglulation of our industry. We respect the gravity of the task at hand for you. We understand, accept, and agree that many of the industry suggestions to reduce this burden were not achievable for valid reasons. However, there was no valid justification or constraints given that we can see for not adopting industry suggestion number 3 bullet point 2. This recommendation is equitable, feasible, within the scope of existing authority and regulatory frameworks, while still achieving the rule's stated goal. Rulemaking that affords us the ability to send mandatory pesticide tests on a per room or random/periodic basis is a scientifically superior approach thats both effective and already employed by pesticide regulators nationwide in agriculture. We emplore you to adopt this in the rule instead of problems masquarading as solutions. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
20	*Email*	John Kingsbury	1/27/2022	I have finished a last reread through the proposed QA rules. I will make a request that I have made before, but do not see in the proposal, so I want to make sure this request is on the record. I strongly urge LCB to adopt a labeling requirement for the use of azadirachtin and other neem derivatives. My preference is that its use be prohibited, but I believe labeling for it would be a more than fair compromise. <u>The presence of azadirachtin and other neem agents is a deal-breaker for most patients.</u> The reasons for this are sound. Unfortunately, its use is also common. Azadirachtin is extremely persistent -being transmitted from mother plants, to clones to harvested plants. • It accumulates in human tissues. • These agents are the likely cause of hyperemesis syndrome. • These neem agents are devastating to tissues, which is what makes them such effective pesticides. These agents are often mistaken to be safe because they are classified as 'organic' pesticides, and because so many citizens and budtenders mistakenly believe that 'organic' means 'no pesticides' it often is consumed without the consumers knowledge. I, along with most patients I know, will not consume products with these neem derivative pesticides. They are nasty. At minimum, their presence should be indicated on the package. I urge you to adopt this rule. **Regarding medical product.** Undoubtedly LCB will assert that all recreational product is medical product. They have done this all along without pesticide and heavy metal testing. It may be that LCB may want to align QA standards as much as possible with 246-70 standards. If DOH decides to reconsider 246-70 rulemaking (which they probably should) I will fight hard to restrict, or at minimum label, products contain azadirachtin and other neem agents. Thank you for your work. This has been a large project. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We are aware of neem and neem related pesticides, and we have noted your suggestion and concern for how these compounds affect may affect the health of patients. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Labelling for neem and related neem based pesticides
21	*Email*	Matt Heist, Green Grower Labs	1/27/2022	The following is our public comment regarding new cannabis testing rules proposed in CR-102:	Unique identifiers for samples, keep 5 pound lot sizes, pesticide

				In Section 2: please add a **unique identifier** as a requirement for sample labeling. As is, this section does not explicitly state that a unique identifier is required on a QA sample. The business name is not a unique ID. We need the business name and the ID of the sample in addition to the other required elements. The unique identifier is probably the most important. The first 3 words in the LCB mission statement are to "Promote public safety.." Further, the stated goals of the LCB are to "ensure the highest level of public safety" The current proposed rules, however, are forged solely out of an LCB commissioned economic impact study. These rules are not scientifically vetted in any way as to their effect on public safety. For example, the proposed CR102 does not include any statement or support indicating the changes have been cleared as maintaining the current standard of public safety by any scientific study or commission, public or private. We strongly feel that increases in lot sizes by orders of magnitude without also increasing the testing frequency diminishes any practical data or value that testing provides. This has a corresponding decrease in public confidence gained through accurate testing and is against the stated goals of the LCB. We recommend keeping the limit at 5 pounds for a flower lot with the current battery of tests. We also recommend use of pesticide testing per enclosed space (e.g., per room or per field) to control costs. Otherwise, we recommend a scientific commission to study the effects on lab testing validity under the new rules to coincide with the LCB mission statement and stated Goals of the LCB. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We appreciate your suggestions regarding sample identification and pesticide testing. The CCRS system that replaced the LEAF system does not produce a unique identifier. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	testing of room or outdoor space only
22	*Email and attached letter*	Lukas S. Hunter, Harmony Farms	1/28/2022	We greatly appreciate the time and effort the WSLCB and specifically the Rules and Policy staff have put into this ruleset. In short the majority of the draft rules provided in the CR102 for this project are spot on. In transparency we drafted our comments thinking about the industry as a whole, specifically taking into consideration industry friends and colleagues, and we hope there can be amendment around pesticide testing at a harvest level, instead of a lot level. We do promote pesticide testing at an intermediate level to be clear. -Thanks and feel free to reach out with any questions, First and foremost, we greatly appreciate the time, and dedication the WSLCB has taken to amend these testing rules to promote the health, safety and wellbeing of consumers, and industry members. We see and understand the complicated balance that must be struck to provide accessible cost for testing for all business models, while also maintaining the viability of cannabis testing labs. We would like to input some further rule change suggestions to benefit the balance of public health and safety, industry needs, and lab viability. We would like to see an amendment to the scope of pesticide testing, a mechanism for retesting in parody with Colorado testing rules, and an ability to improve the integrity of intermediate products that pass mandatory tests. The draft provided in the CR-102 currently requires pesticide testing for each lot of useable marijuana, this adds a disproportionate cost to different agricultural models used in our industry. We believe a way to combat this is to remove pesticide testing from the lot sizes and apply it to a harvest level test. Not only does this provide parody with other agricultural pesticide testing models but, this will remove redundant pesticide tests sent to the lab. We are fortunate to have a traceability system that is able to track seed to sale, and more relevantly track a “lot” or “lots” from a single harvest. When looking for pesticide contamination or utilization, one representative sample from the harvest is more than sufficient to demonstrate the utilization or lack thereof dangerous levels of residual pesticides for useable marijuana. This reduces the incurred cost of pesticide tests to all industry members, rather than providing favorable fees to indoor farmers, and requiring outdoor farmers to pay a multiplier of that fee. *WAC 314-55-101 (3) should be amended as follows,* *(a) Samples must be of roughly equal weight not less than one gram each. Each sample must be deducted from a harvest as defined in WAC 314-55-010(14).* *(b) For marijuana flower weighing up to 10 pounds, a minimum of eight samples must be taken.* *(c) For marijuana flower weighing 10 pounds or more but less than 20 pounds, a minimum of 12 samples must be taken.* *(d) For marijuana flower weighing 20 pounds or more but less than 30 pounds, a minimum of 15 samples must be taken.* *(e) For marijuana flower weighing 30 pounds or more but less than 40 pounds, a minimum of 18 samples must be taken.* *(f) For marijuana flower weighing 40 pounds or more but not more than 50 pounds, a minimum of 19 samples must be taken.*	Harvest testing for pesticides, voluntary/desired retesting by processor, remediation

				(g) A minimum of 3 samples from a harvest as defined in WAC 314-55-010 (14) must be collected for pesticide testing in accordance with WAC 314-55-102 (3,h) *WAC 314-55-102 (3)* *(h) Pesticide screening. For purposes of pesticide screening, ~~a~~ the sample~~s~~ and the related quantity of marijuana from harvest as defined in WAC 314-55-010 (14) is considered to have passed if it meets the standards described in WAC 314-55-108 and applicable department of agriculture rules.* As these rules stand, labs have an inability to retest product if there is lab error. This is a common practice that takes place in the industry, however it is not clearly permitted in these proposed rules. Our labs have proven to have integrity when it comes to their results, however there is always outlier results where something has gone amiss where a sample receives an abnormal result not representative of the batch or lot it came from, this is a product of lab error. For the protection of the labs in the event of a faulty failing lab test, we would like to see an ability to retest without request of the WSLCB. Now this is not intended to encourage "test shopping" behavior, but looking to allow retesting for inaccurate results. We would like to propose a retesting standard similar to Colorado's protocols under their rule, *4-135 – Regulated Marijuana Testing Program: Contaminated Product and Failed Test Results and Procedures.* Subsection B provides an outline for product that has "failed" allowing an industry autonomous retest by allowing two new samples to be provided from the same lot and then be retested at either the same testing facility or two separate facilities. If both or one of the new samples fails then the retest proves the sample was indeed accurate and the lab was not at fault for the error. This provides the labs with an ability to validate their results, and provides the industry with a mechanism to retest with ease. Further this action will alleviate a workload from the WSLCB with approving retesting. From industry experience retests are regularly granted, yet the delay in getting a retest approved unnecessarily belabors the timeliness of moving through the testing process. *WAC 314-55-102 (6) should be amended as follows,* *(b) Retesting. ~~A producer or processor must request retesting. The board may authorize the retest to validate a failed test result on a case-by-case basis~~. A licensee may retest a if a lot or batch fails for water activity testing, foreign matter screening, microbiological screening, mycotoxin screening, residual solvent screening, heavy metal screening, or pesticide screening. The producer or the processor requesting the retest must pay for the cost of all retesting. For retesting the licensee must create two new Test Batches, each containing the requisite number of samples, and have those Test Batches tested for the required contaminant test that failed. Such testing must comply with sampling procedures in WAC 314-55-101 (2)* *(i) A Licensee must either (1) submit both new Test Batches to the same testing lab that reported the original failed test result, or (2) submit the new Test Batches to two different testing lab* *(ii) If both new Test Batches pass the required testing, then the batch or lot will be considered to have passed the prior failed test.* *(iii) If one or both of the Test Batches do not pass the prior failed test, then the batch or lot is determined to have failed the applicable test.* We would like to see a mechanism to retest samples if they have passed mandatory quality assurance testing, but the result doesn't meet company standards. Currently licensees are permitted to retest if a sample has failed, however there are countless instances where a sample does not pass an action level great enough to fail, but is still dangerously high rendering a product damaging to a company's image or reputation. In example for a residual solvent test, if the final test result of is 4900ppm butane, this is technically a passing test result, however this is not what we would determine to be safe for consumer safety, and would be damaging our brand image. We would like to have a mechanism to where a licensee could retract the mandatory QA sample test, refine the intermediate product, and provide a new sample for mandatory QA testing. Currently the mechanism used by the industry to accomplish this is to send in non-mandatory samples to the lab to see if a product meets company extraction standards. However, sending in non-mandatory samples adds additional costs to the licensee. Allowing retesting of a "passing" product for this scenario of providing a higher quality more refined product to the consumer, will save costs to the industry by mitigating the need for redundant testing, and more importantly allow for cleaner product to make its way onto the shelves of our retail stores. This allowance would only be extended for intermediate products and would not pertain to potency testing. *WAC 314-55-102 (6) should be amended as follows,* *(c) Remediation. Remediation is a process or technique applied to quantities of marijuana flower, lots, or batches. Remediation may occur after the first failure or unfavorable passing test result, depending on the failure, or if a retest process results in a second failure. Pesticide failures may not be remediated.* *(i) Producers and processors may remediate ~~failed~~ marijuana ~~flower,~~ lots, or batches so long as the remediation method does not impart any toxic or harmful substance to the useable marijuana, marijuana concentrates, or marijuana-infused product. Remediation solvents or methods used on the marijuana product must be disclosed to:*	

				We appreciate your dedication to getting this ruleset corrected and your time in working with the industry and other stakeholders. We are happy to further elaborate on any of the comments made in this document and look forward to the adoption of this ruleset. -Peace, Love, & Harmony Farms **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We appreciate your suggestions regarding pesticide sampling and testing, and voluntary retesting of intermediate products. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
23	*Email*	Annie Reding, DOC CROC LLC	1/28/2022	I am the Managing Director and owner of a small marijuana business in Olympia and have been working in this industry since 2015. During this time, we have had two occasions where pesticide testing was performed and we passed with flying colors. Please find my concerns and feedback for the introduction and implementation of CR-102 Pesticide Testing. Regulation CR-102 will cause an unnerving burden which has the potential to ruin our business. The new testing method that will be introduced with CR-102 will be such a high cost for me as a small volume farmer, that it will take an enormous chunk out of our profits and cause a destabilizing effect on the staff, not to mention a price increase to retail stores. All this, in conjunction with the current staffing crisis and inflation risks, is a serious disadvantage for the small players. This could devastate our business and turn potential sales away from us to our competition with large growing facilities able to absorb the increase, making it impossible for us to compete. Our stores have become reliant on the current business model and their customers, your voting constituents, have come to expect stability from their product and their price. I only heard about this regulation on Wednesday, two days ago, and only due to the luck of having my industry contact from the testing facility mention it to me and the potential impact on my business as well as the rest of their clientele. I would have expected that consultation with small businesses like ours, would be your first priority in formulating such changes. However, rather than be your first step, it seems like we are relegated to becoming an afterthought, or perhaps no thought at all. If you had been sending things out and sending notices, they were certainly not done so in an accessible manner. This change of regulation has been rushed through without an evaluation of economic consequence for the industry as a whole, especially the smaller grows, which are many. The idea of not properly assessing the current market, together with no market study on the impact to smaller growers with weekly perpetual harvests, who are more vulnerable, seems rushed to get through to the legislators and add another burden to the marijuana farmers. It is also unjust in that the people who are continuing to do the right thing, end up being the biggest losers and the least likely to survive. My first recommendation is to put this on hold for now, apply a more rigorous due diligence process, which would include providing the smaller growing facilities with relevant data so we may be part of the solution and have current ideas with our experience in the market. Secondly, to my knowledge, the only growers which have historically been in breach of the using banned pesticides are the Tier 3 growers. This change should reflect the fact that they are the primary focus of the need for such extensive and expensive measures. Apologizies if my assumptions are incorrect, in which case, kindly provide the data for me. Thirdly, it would be an option to create a system where each facility contributes a fee for randomized testing depending upon the grow square footage and necessary frequency set in place. This could be added to our yearly license fee. In summary, fair is fair, and in it's common state, this is far from fair. Your regulation change, and this industry as a whole, would benefit greatly from more inclusion and consultation with people like us. Please respond to me with enough time to appeal this rule change before it moves forward. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. Also, have you signed up for our rulemaking distribution list? If you are signed up, we will send you notices about rulemaking activity by email. You can add your name to the email list at: https://public.govdelivery.com/accounts/WALCB/subscriber/new. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing costs affecting small producers / processors

24	*Email*	Board of Washington Sun and Craft Growers Association	1/30/2022	Please find attached the comments submitted by the Washington Sun and Craft Association (WSCA) regarding the proposed QA rulemaking. We look forward to a productive conversation that may address some of our concerns. **(Note: The WSCA later submitted a second comment letter, and specified that it replace the original letter that was submitted with this message.)** **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	No message submitted
25	*Email*	Board of Washington Sun and Craft Growers Association	1/30/2022	Please submit the attached PDF as the official document for reply to CR102 rules proposal on QC testing. (Please ignore the former WORD document sent.) The Washington Sun and Craft growers Association (WSCA) is the only licensee lead cannabis trade group in Washington. Our mission is to advance and protect the interests of sun and craft cannabis growers through the development of rule and law that supports an economically and environmentally sustainable cannabis industry. The WSCA supports the adoption of rules establishing pesticide testing to ensure the safety of consumers and cannabis workers. Our intent is to suggest options that could be adopted within a single 30-day extension of the current CR-102 and implement this rule making in a timely manner while ensuring that the cost of these rules to small producers remain economically affordable. The December 8th, 2021, Small Business Economic Impact Statement (SBEIS) determined there would be substantial increases in costs that would be a significant hardship to 72% of producers and processors if the current proposal were adopted into rule. Sampling from larger *'quantities of marijuana flower'* mitigates increases for a very few, but it places the greatest financial burden of pesticide testing on the smaller craft producers who pride themselves on growing clean cannabis. Main takeaways from the SBEIS: • The suggestion in the SBEIS that producers and processors may need to adjust their business practices to focus on larger harvests or batches is not acceptable to cultivators that built their business based upon small harvests and batches. Only producers and processors with the scale needed to produce and test large amounts of a single strain benefit from this ability to sample from larger *'quantities of marijuana flower'* to realize cost benefits. Small craft producers will not be able to benefit from sampling from larger *'quantities of marijuana flower'* and will in fact be financially burdened relative to their larger competitors if proposed rules were to be implemented. • The survey that the SBEIS relied on for many of its assumptions discussed only a change from 5lb lots to 10-pound lots. It did not fully address the impact of allowing a single test to represent up to 50 pounds as proposed. Comparing the responses to a proposed increase to 10 pounds is not transferable to an increase to 50 pounds. • The SBEIS concludes that sampling larger *'quantities of marijuana flower'* will result in reduced testing thus reduce the costs. The SBEIS did not account for the substantial reduction of overall tests that would be conducted across the industry by moving away from 5 pound lots to the proposed 50lb level. Labs inform us this would result in substantial price increases to cover fixed costs that labs are currently able to distribute over significantly more tests. • The SBEIS does not account for the fact that under this framework there is no limit to the size of a batch of extract. This will further increase the relative cost of single farm-sourced, small batch extracts and decrease the costs of highly processed, homogenized, batches of extract that large processors typically produce. This will have the effect of making high potency distillate-based products that typically are produced in large batches cheaper while making lower potency, small batches more expensive. This will further exacerbate the issues often raised by the prevention community about access to high potency, inexpensive products • The SBIES does not address the fact that very few labs are able to conduct pesticide testing and many labs cannot afford to adopt such testing. Labs that do not offer pesticide testing will not be a viable option since they will have to create subsamples, send them to another lab, and wait for them to conducts pesticide testing before the results can be published, thus dramatically increasing the time to complete a sample. The industry will move away from these labs as a result which will likely lead to conglomeration of labs resulting in less competition and increased prices. The proposed rules implementing a system based upon self-selection of samples for pesticide testing goes against widely adopted standards for similar testing regimes administered by WSDA. Testing for pesticides using self-selection of samples lacks credibility as it can be easily manipulated and cheated by unscrupulous players. It is hard to conclude that a system meant to catch violators using illegal pesticides would work if it relied on those very violators to select their own samples.	Pesticide testing, costs affecting small producers / processors, lot sizes

				WSCA believes that these concerns can be addressed with changes to the current proposed CR102. We recommend one of the three following changes to the proposed rules: 1. Revise WAC 314-55-102 (3) (h) Pesticide screening to adopt the same language as proposed for heavy metal testing in section (3) (g). The proposed rule for monitoring proven dangerous heavy metals should be adequate to also monitor pesticides. The goal of this rule should be to increase compliance and reduce the use of illegal pesticides. This is best achieved by random, or investigation driven inspections as proposed for heavy metals in WAC 314-55-102 (3) (g). A robust random sampling would do the most to ensure compliance. The LCB recognizes the importance of random or investigative third party-based sampling as it pertains to heavy metals and should adopt the same standard for pesticides. 2. Remove WAC 314-55-102 (3) (h) and create a new section addressing pesticide testing separately from the current I-502 panel of tests. The new section would require pesticide audits by a licensed lab conducted bi-annual or annually, in a random fashion. This section would detail how labs would be contracted by the licensees to conduct on site collection of samples from living or harvested plant material and report the results to the licensee and the LCB. 3. We recommend that the current I-502 panel of tests, other than pesticides, continue at the 5-pound lot level as defined by 314-55-010 (20) (a) (b). Increasing the lot size from 5 pounds to 10 pounds is also recommended. We suggest allowing up to 50 pounds from a single harvest to be tested for pesticides together regardless of number of strains. For example, if a licensee had 6 different strain specific 5 pound lots, they would select a sample from each of those lots and send the conglomerated sample in for pesticide tests. This approach would effectively separate current 5 pound I-502 panel testing from pesticide testing. This would implement pesticide testing while further work is done with other agencies to adopt scientific based sampling regimes for testing pesticides using third party selection of samples. This approach also has the advantage of being able to test lots already tested for the 1-502 panel for pesticides. Any one of these approaches will adequately address pesticide testing while reducing the economic impact for the majority of cultivators and increasing the chances that the use of illegal pesticides will be detected. It is our recommendation that the LCB adopt our third suggestion as it most closely resembles the current proposed testing framework. Current proposed legislation (SB5699 and HB1859) would create an interagency task force led by the WSDA. Our review of testing programs developed by the WSDA proves that they do not rely on self-selection of samples and such an approach would never be considered a legitimate approach to testing. Each of our proposed changes to draft rules would accomplish the goal of pesticide testing while allowing this interagency effort the time needed to further develop quality assurance testing standards. We believe that as the industry evolves and moves toward federal legalization that many testing rules and responsibilities will be re-developed in cooperation with agencies that traditionally handle these types of procedures and have the expertise and history of doing so. We thank the LCB for its thoughtful approach to this rulemaking and hope that rulemaking is adopted that does not increase costs to the 72% of businesses identified as being negatively impacted by the proposed CR102. Sincerely, Board of Washington Sun and Craft Growers Association Jade Stefano – Puffin Farms Jason Poll – Gorge Gold Jeremy Moberg – Cannasol Farms Matthew Frigone Bernard – Lazy Bee Garden Micah Sherman – Raven Grass Ryan Sevigny - Landrace Shawn DeNae – Washington Bud Company Tamara Weinmann – Bellevue Cannabis **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	

26	*Email*	Clayton Sperry, Gorge Gold	1/31/2022	The proposed new testing rules will severely impact over 70% of the farms that are already struggling. While pesticide testing is important this is the wrong way to go about it. The LCB is constantly SAYING they want to help the small business cannabis farms but their ACTIONS are usually the opposite of that. This proposal will further give the advantage to Large Corporate farms and do little to ensure cannabis is safe. Please listen to the WSCA proposals on ways to really solve the pesticide and heavy metal problem and not hurt small farmers. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing, costs affecting small producers / processors, lot sizes
27	*Email and attached Letter*	Adán Espino, Craft Cannabis Coalition	1/31/2022	The Craft Cannabis Coalition (CCC) is an association of over 40 cannabis retail stores in Washington State, with our membership being amongst the first to gain licenses through the state lottery after the passage of Initiative 502. Our members are local and family owned small businesses that advocate to ensure a well-regulated and safe cannabis industry. The CCC is in support of the adoption of rules establishing pesticide testing to ensure the safety of consumers and cannabis workers. We stand with those within the state industry that are similarly asking for the adoption of such rules, such as changes to CR-102 as proposed by the Washington Sun and Craft Growers Association (WSCA). The CCC member stores, and Washington state cannabis retailers at large, have long supported an emphasis on product and consumer safety for all cannabis products in the marketplace. As the end point of the cannabis system and face to the consumers, it is of great importance that the integrity and trust of consumers in all products sold at retail stores is maintained. This trust must come in either a highly regulated production line of products from our producer/processor friends or through cannabis retail stores themselves policing each and every product that they intend to sell. The latter is extremely burdensome and seriously dangerous for retail stores, as well as simply unrealistic. Cannabis retail stores have relied on the high integrity of our friends in the producer/processor sector to ensure that all cannabis products within the marketplace are of high quality and safe for the consumer. They have done a good job and can continue doing so if there exists a well-functioning regulatory structure for testing cannabis products. It is for these reasons why the CCC is in support of changes proposed to CR-102 to ensure a higher quality pesticide and product testing structure for our friends in the producer/processor sector. These proposed changes create a more straightforward regulatory structure and retains product integrity for cannabis retail stores. Cannabis retail stores simply do not want to rely on an honor system to determine product safety. The Craft Cannabis Coalition supports any of the following changes to CR-102: 1. Revise WAC 314-55-102 (3) (h) Pesticide screening to adopt the same language as proposed for heavy metal testing in section (3) (g). The proposed rule for monitoring proven dangerous heavy metals should be adequate to also monitor pesticides. The goal of this rule should be to increase compliance and reduce the use of illegal pesticides. This is best achieved by random, or investigation driven inspections as proposed for heavy metals in WAC 314-55-102 (3) (g). A robust random sampling would do the most to ensure compliance. The LCB recognizes the importance of random or investigative third party-based sampling as it pertains to heavy metals and should adopt the same standard for pesticides. 2. Remove WAC 314-55-102 (3) (h) and create a new section addressing pesticide testing separately from the current I-502 panel of tests. The new section would require pesticide audits by a licensed lab conducted bi-annual or annually, in a random fashion. This section would detail how labs would be contracted by the licensees to conduct on site collection of samples from living or harvested plant material and report the results to the licensee and the LCB. 3. We recommend that the current I-502 panel of tests, other than pesticides, continue at the 5-pound lot level as defined by 314-55-010 (20) (a) (b). Increasing the lot size from 5 pounds to 10 pounds is also recommended. We suggest allowing up to 50 pounds from a single harvest to be tested for pesticides together regardless of number of strains. For example, if a licensee had 6 different strain specific 5 pound lots, they would select a sample from each of those lots and send the conglomerated sample in for pesticide tests. This approach would effectively separate current 5 pound I-502 panel testing from pesticide testing. This would implement pesticide testing while further work is done with other agencies to adopt scientific based sampling regimes for testing pesticides using third party selection of samples. This approach also has the advantage of being able to test lots already tested for the 1-502 panel for pesticides. Any one of these approaches will adequately address pesticide testing, support craft cultivators, and avoid a potential reality that cannabis retailers are forced to police the integrity and safety of cannabis products.	Pesticide testing, costs affecting small producers / processors, lot sizes

				WSLCB response: The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
28	*Email and attached letter*	Jay Burns, Treeline Analytics	1/31/2022	Please find comments from Treeline Analytics on CR102 12 08 21 6A QA/QC testing rules. Treeline Laboratories, LLC has identified concerns regarding the current CR102 regarding Quality Assurance Protocols. We have identified changes that are not based on best scientific practices and/or make compliance and enforcement impossible. We are greatly concerned that some of the proposed changes to 314-55 will weaken consumer protection, safety and knowledge and will be detrimental to producer/processors. Of most concern is the inadequate analysis performed in the Small Business Economic Impact Statement. Specifically, the impacts proposed changes may have on laboratory pricing structures for all fields of testing, not only pesticides were not investigated. We believe that these changes will increase the cost of testing with a disproportionate impact on small craft producer/processors (P/P). Our comments are below. **Specific comments on 12 08 21 6A CR102** ***314-55-101*** (2) Sample collection. This section does not require samples to be representative. There are no guidelines for how samples are to be collected, *i.e*, from different areas of the lot. Washington DoE identified that inadequate sampling protocols is a significant area of concern. The Cannabis Science Task Force determined that addressing the area was beyond the scope of the committee, but it is an area of concern. WSLCB should take this opportunity to improve the current sampling requirements, not remove them entirely. Without clear regulation and enforcement of initial sample collection, all data produced downstream is unverifiable as representative of the product and does not provide the cannabis consumer the safety and knowledge that is implied by the Certificate of Analysis and product label. (3) Additional sampling protocols for quantities of marijuana flower. Increased sample sizes will dramatically reduce the accuracy of laboratory test reports. As has been mentioned at several listen and learns and collaborative dialogues, sampling 4 grams from a 5lb lot is pushing the limits of good sampling practice. Increasing the lot size to 50lbs and not requiring more than one test for each parameter (for example, 3 potency measurements per 50 lb lot) will increase the standard error on the measurements dramatically and may be statistical indefensible and insignificant. WSLCB should have a 3rd party statistical analysis of the impacts of this change on consumer protection and knowledge. (5) The laboratories are a third party and do not determine quantities or compounds tested. WSLCB regulates this aspect of the industry and sets the standards. If laboratories determine if a sample passes or fails (as opposed to providing data to the regulatory body) then laboratories are no longer 3rd party but an agent for the State and should be clearly defined in WAC. ***314-55-102*** 1(C) Laboratories should be allowed to reference samples for any test to allow collaboration on difficult samples. This is a part of best scientific practices. By preventing the labs from utilizing one of the basic tenants of the scientific process, WSLCB is hindering the advancement of cannabis science and not providing the consumer with the best possible information. 2. General QC testing requirements for certified labs. (d) The language of the section requiring failing for a limit test that is not required or a compound that is not known is impossible for a laboratory to comply with and is impossible for WSLCB or any agency to enforce. How would an “unknown” compound be identified as not a naturally occurring cannabis compound (either known or unknown)? It is only possible for laboratories to quantify known compounds, but impossible for a lab to test for all “known” compounds. 3 Quality control analysis and screening (A) Establishing the lower limit of cannabinoid quantification at 1.0 mg/g may be problematic for certain end product and may make it difficult for processors to make accurate calculations for final products. Would 0.5 mg/g become 1 mg/g? Or < 1 mg/g. This requirement also implies that current laboratory methodologies could not determine if a hemp product contained 0.3 mg/g THC which may have implications for the regulation of the hemp industry. 4 End products and intermediate products should be clearly defined.	Sample collection, referencing by labs, intermediate/end products, remediation, SBEIS

				4 (d)End products. Not clearly stated that products could be classified as end product without going thru intermediate product. Producer could request end product testing without required intermediate tests. 4 (e) Should say intermediate products that have not been changed in any way and have passed QC requirements in (4) (c) (iv). 6 (c) Failed test samples Methods of remediation should be clearly defined. Laboratories may not know if a sample comes from a remediated lot. Without knowing what method was used for remediation, it would be difficult for the laboratory to determine if any harmful or toxic substances remain. This section would be easier to comply with and enforce if methods of remediation were clearly defined. P/P should be required to notify laboratories if a sample is being retested after remediation. ***Small Business Economic Impact Statement:*** The SBEIS is inadequate to address the changes in industry dynamics that may occur because of the proposed regulations. The study did not consider that labs will likely need to raise testing prices of all fields of testing (Microbiology, potency, mycotoxins, pesticides, etc.) Fixed costs for the laboratories will not change (Payroll, Lease, Insurance, Machine maintenance, etc.) and these costs will need to be recovered over a smaller volume of samples due to increased lot sizes. It is likely these price increases will equal or exceed the projected savings incurred by increased lot sizes. In addition, this will disproportionately impact the smaller P/P (Tier 1, Tier 2) as they will need to pay the higher price for testing without the ability to take advantage of the increased lot sizes. It should also be noted, these changes may result in the restructuring of the number and type of employees needed. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
29	*Email*	Colum Tinley, Discovery Garden	1/31/2022	As a craft grower/processor I object to most of the lab testing rule changes being proposed since they will increase my cost of doing business without improving public safety. I support increasing the lot size from 5 lbs to 10 lbs or even more sensible to all of the flower of the same variety grown in a particular harvest. The absurd thing about WA State's lab testing policies has always been that selection of each specimen has always been left up to the business to select and this practice makes it really easy for cheaters to cheat the system. I believe testing should take place in a manner that takes products off of store shelves and tests them. Any testing scheme that allows the business to select the specimens to be tested is flawed making it easy to circumvent the intention of the rule, which is public safety. The LCB's current system of randomly selecting a business to test for pesticides is flawed if the business is given warning that an enforcement officer will be coming by to test for pesticides as this just gives cheaters the opportunity to clean things up before such a visit. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing, sampling
30	*Email with attached letter*	Amber Wise, PhD, Medicine Creek Analytics	1/31/2022	I am attaching my written comments in regards to the CR102 regarding Quality Control Rules changes being proposed. Don't hesitate to reach out to me if you have any questions. Thank you for accepting comments on quality assurance testing. Having effective QA rules is essential to protecting the health and safety of the public; however, the rules must be easy to understand and realistic to implement if they are going to be effective. I have attempted to review and comment on these rules with that principle in mind. First, I will address the **scientific problems** with the proposed new QA testing requirements. **314-55-101: Quality control sampling:** Section 3 describes new lot sizes for flower and how many grams of sample the producer must submit.	Sample collection and sizes, testing from retail shelves, referencing samples, solvents, remediation, SBEIS

				The first major scientific problem is that, without independent and consistent sampling protocols (see below), sending in *more* flower DOES NOT make the result *more* representative of the lot. A single test will be run by using a very small subset of submitted samples and the rest will need to be disposed of (at additional and significant cost to the labs). Second as section 3 does not include any changes our guidelines in how QA samples are pulled from the larger bulk lot, the producer/processor still has the "choice" of how the sample is taken. Until a less-biased, more representative way of taking samples is required, no amount of lab standards will ensure the values on the COA will be representative of what the consumer is purchasing at the store. P/Ps who want to follow the rules will do so to their financial detriment and licensees who want to break the rules will do it with very little mechanism to prevent or detect it. Third, sending in more sample based on lot size creates a logistical problem for the labs to store and dispose of the additional material that will not get tested and simply is wasted. If we truly wanted to know the safety of what consumers were actually purchasing at retail, we recommend supplementing QA testing with a more robust 'secret-shopper' style sample collection from retail outlets. This would at least give us a better idea of what consumers are purchasing system-wide. Section 5 has an update that now reads (emphasis mine to highlight the one-word change) *"labs **must** reject or fail a sample if the lab has reason to believe the sample was not collected in the manner required by this section, adulterated in any way, contaminated with known or unknown solvents, or manipulated in a manner that violates the sampling protocols, limit tests, or action levels*." This puts an enforcement requirement on the lab that is simply not tenable. First, there is no such thing as an 'unknown solvent' test; we test for knowns, not unknowns. Furthermore, the labs are not present when the samples are taken, so there can be no way for us to have a 'reason to believe the sample was not collected in the manner required,' short of a P/P actually telling us they broke the rules. The labs are in no position to enforce sampling protocols and this change in language creates a lot of problems. Moreover, striking section 6 removes any penalty for a lab not complying with section 5, so it seems irrelevant. I recommend striking all of section 5 and replacing it with something that puts the onus on the LCB for investigating suspicious sampling instances, where it should be. **WAC 314-55-102 Quality assurance and quality control** Section 1 language seems confusing. A lab must be certified for mycotoxin screening (section 1(a)(v)) and pesticide screening (section 1(a)(vi)), but then Section 1(c) indicates that labs may subcontract samples to other labs for mycotoxins and pesticides. Does section c supersede section a? In Section 3(d) (Microbiological screening), I recommend correcting the Tables in this section relating to the confusing use of the language "unprocessed" vs. "processed plant material." I recommend returning to current WAC language of "Extracted or Processed Botanical Product" instead of "processed plant material." Second, the units of CFU/g for the salmonella and e.coli tests are incorrect. The current WAC states "not detected in 1 gram" of product. I recommend using correct units and/or language in these tables. In Section 3(f), there is a confusing set of words (highlighted in the following sentence): "Residual solvent results of more than 5,000 ppm for class three solvents, 50 ppm for class two solvents, and 2 ppm for any class one solvents as defined in *United States Pharmacopoeia USP 30 Chemical Tests / <467> - Residual Solvents (USP <467>)* **not listed in the table below** fail quality control testing." What does "not listed in the table below" refer to? Are there other solvents listed in the USP document that samples might also fail for? Please clarify. If there are other solvents we should be testing for, please add them and their CAS# to the updated table. Section 6(b) regarding retesting contains very vague wording. It requires that the "producer or processor must request testing," but FROM WHO? What is the procedure? Via email? Does the original lab run the re-test? The WSDA lab? Some other 3rd party testing lab? Who makes the final decision on "failure" of a lot? Section 6(c)(iv) regarding remediation contains confusing language. It states *"if a failed quantity of remediated marijuana is not remediated or reprocessed in any way after a first failure, it cannot be re-tested."* This prevents anyone from requesting a re-test unless they have "remediated" the product in some way first. If something fails and you don't remediate it, how or why could you request a re-test? How will anyone confirm something has been remediated? Will the P/P have to report that somewhere?	

				In addition to my concerns with scientific problems with the draft rules, I have concerns that the SBEIS process was only applied as it relates to P/Ps and not to labs. None of the labs were consulted during that process and we are most definitely small businesses facing impacts from these rules. From a lab's perspective, a large increase in lot size will drastically reduce the number of samples we receive, which will obviously result in much lower revenue. Some labs may choose to increase the cost of testing to account for this which will reduce or erase any savings growers might get from larger lot sizes. From the grower's perspective, this is a HUGE disincentive to produce smaller harvests of more diverse strains, as each one is considered a separate lot. This only incentivizes much larger licensees to reduce the number of strains they harvest and increase individual lot size. The smaller farmers who seem to be the ones most hurting will be the ones who feel the largest economic impact through increased testing costs. Moreover, while not finalized yet, everything is on track to implement the Cannabis Science Task Force's recommendations for lab accreditation in the near future. The increased lab standards and oversight will dramatically increase the cost of testing, so the price per test will absolutely be much higher for the licensees. I'm not sure the EIS considered any of these likely adjustments in their assessment of the cost savings to licensees. From a purely economic perspective, the cannabis industry has given an incredible boost in revenue to the state and the WSLCB. It would seem that those resources would allow the oversight agencies to include better science as well as other economic considerations for these rules changes that will drastically impact which labs survive these types of changes. These QA testing rules changes have been ongoing for over three years and I have reviewed and commented on every round and iteration. It is frustrating to see the science—science that is available to you if you simply considered the labs' collective input that has been shared time and again by me and by other labs—continually left out of WA policymaking. I hear a lot of state policy makers talk about if/when cannabis is legal on a national level, but if we don't look to the actual science and to what other states are doing for standards and requirements and align ourselves, Washington cannabis will struggle to participate in that national conversation. I appreciate the opportunity to comment on the regulatory process and hope you'll take these suggestions into consideration. As always, don't hesitate to reach out if you have any questions about the science or costs incurred, we're happy to share. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
31	*Email*	Al, Emerald City Growers	1/31/2022	Name is Al, the owner of licence # 416433. Reaching out to express support for increase of lot size. As producers / processors in i502, we create the product from scratch and costs associated with doing business as i502 are staggering. Increasing the sample size to perhaps 20lb or bigger will ensure fair representation, reduced admin, ultimately reduce costs of production yet giving the same product to the end user. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Lot size increase
32	*Email*	Colin Lukey, Yield Farms	2/01/2022	I wanted to voice my opposition to CR102 Proposed rules for many reasons. First and foremost, the proposed rules for pesticide testing note that each sample submitted will be self-selected. This will only further the cheating that is already happening within the industry. I am 110% on board for pesticide and heavy metal testing, but when it gets implemented it needs to be randomized and handled by the LCB who selects the samples at the retail level. I understand this would incur costs to the state, but since the decommission of LEAF data, there should be extra funds available that you are no longer paying them. Not to mention the amount of tax revenue that the state receives from our industry. With Washington state making over $470 million in tax revenue (in 2020) just from cannabis, it would be easy to hire additional LCB agents whose sole job is to collect samples for the state to test. Eventually it would be best to see pesticide/heavy metals testing done by the WSDA and WSDE.	Sample collection, labs performing pesticide testing, LCB sampling, lots sizes, retail testing

				As I understand it, there are only 2 labs who currently offer pesticide testing. Requiring pesticide testing in the proposed way would greatly increase cost and wait times for results. Beyond that, as a small producer ourselves, it would make it nearly impossible for us to meet the 50lb lot requirement. I understand we can test less, but that would only increase our costs related to that batch, beyond what we can reasonably get for our products when sold to retailers. Also, having one I-502 panel test for 50lbs is crazy. Cannabis as an agricultural product, varies widely from plant to plant, and bud to bud. I disagree with the current testing methods (One number for 5lbs) because even that is not close to representative of what the end consumer is getting. It really needs to be a range of potency, but that's a discussion for another time. My last issue with the proposed rules is that this will only further benefit the couple of giant producers in the state, who have the ability to grow hundreds of pounds of each strain they grow. This proposed rule is happily supported by them because it will be one more way to push out their competition. My suggested solutions to this proposed rule are simple. Keep pesticide and heavy metal testing separate from QA testing. Products should be tested randomly at the retail level because there would be no way for the farm to cheat, and retailers are much easier to access for LCB agents than some farms, eventually passing this testing onto the WSDE and WSDA (who already do the testing for all other agricultural crops). For the sake of all the small farms in Washington, please DO NOT pass CR102 **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
33	*Email*	Mark Ambler, Breeze Trees	2/01/2022	Thank you for the opportunity to provide these comments in regards to WSR 22-01-055. Breeze Trees, LLC is a Tier 1 producer/processor in Bellingham, Washington. WSDA allows about 620 pesticides to be used on cannabis. Only about 36 (5.8%) of those WSDA allowed pesticides are included in these proposed pesticide testing rules. We don't use any of the pesticides these rules would require us to test for. None of the pesticide product labels say these products should be used on cannabis. We should not be forced to test for a product we don't use that has no legal recourse for use on cannabis. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing
34	*Email*	Demaris Hendrix, Mother's Other Garden	2/01/2022	I own Mother's Other Garden P/P. Tier 1. We are a family business who grow one crop per year. The impact of increased cost for this testing could very well be what puts us out of business. Please consider that these rules will give the largest farms another advantage over us smaller operators. We produce small batch craft cannabis flower for wholesale to retailers. Some of our batches are not even 5 pounds. Please keep current testing separate from pesticide testing. The regular i-502 QC test could continue with 5lb lot testing (or increase to 10 pounds) and test pesticides annually or bi-annually with random final product testing of finished products, as the WSLCB and WSDA currently conduct. Heavy metal testing is proposed done by random collection by WSLCB agents from finished products offered for sale. Pesticide testing could easily follow that path to ensure clean product. Please consider the small farmer in your decisions. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers.	Pesticide testing, costs affecting small producers / processors, lot sizes

				Was the comment reflected in the adopted rule? This comment was not reflected in the final rule.	
35	*Email with attached letter*	Jeff Doughty, Capitol Analysis	2/01/2022	My name is Jeff Doughty and I am the CEO/Founder of Capitol Analysis, a Washington State accredited cannabis testing laboratory. I am also a member of the former Cannabis Science Task Force (CSTF) Steering Committee. I have a master's degree in physics from Portland State University, as well as many peer reviewed publications. I also employ a number of highly qualified scientists, including a PhD chemist as my lab director. I have also been a grower in the past, and know the battles that my clients fight on a daily basis; from their perspective.Lastly, I am a not just a consumer but have the perspective of a parent of a sick child. My 1 year old daughter was diagnosed with liver cancer in May of 2021. She has since recovered, but I have had the difficult conversations with pediatric oncologists, regarding the treatment of my own child with cannabis. As such, I am uniquely qualified to speak to the effects that proposed testing rules can have on the industry. There are not a lot of folks out there with the experience that I have. That said, I have some serious concerns about the currently proposed CR-102 regarding pesticide testing. These concerns are multi-faceted, but they all center on the same section. Let me be clear, I agree with nearly all of the proposed rule set, but there are a few sticky details that have the potential to cause great harm within the cannabis industry. I agree that we need pesticide testing for Washington cannabis, this is a very important step forward. However, I specifically have a point of contention with the proposed changes to lot sizes. First off, the science does not support this change. The changes seem to be arbitrary and not driven by data at all. Where did these lot sizes come from? Certainly not from any statistical analysis of representative samples, because this moves us further away from representative samples in the laboratory. This is particularly important as we move lab accreditation into the realm of the Department of Ecology. The CSTF has done an amazing job in bringing up the scientific rigor for the lab accreditation process, but these lot size changes undermines all the work we have done over the course of multiple years. As has been discussed multiple times at many levels, without a representative sample in the lab, none of the rigor in accreditation means anything. Bad data in, bad data out, so to speak. To be honest, these lot size changes were very surprising to me, because we've been through this! We've had these conversations ad nauseum and I thought we were past this! This change WILL increase variation in test results. This change WILL reduce public trust in Washington cannabis testing, because of that increased variation. This is not speculation, it is mathematics. All that said, the core idea was to reduce testing costs as we implement pesticide testing. This is a noble cause that I agree with. We need to implement pesticide testing in such a way that it does not kill off small businesses. This is not that way. The labs do not exist in a vacuum. We are businesses that need to pay our staff and cover our fixed costs. If we cannot do so, we go out of business, it's that simple. It is basic economics that if our fixed costs remain the same, but the sample volume is drastically decreased, the cost per sample will drastically increase in order to compensate. This is not a choice we would have, we MUST raise prices in order to pay our bills if these changes go into effect. This means that all samples will be priced as if they came from a 50 lb lot, but most of my clients are nowhere near growing that much at a time. This will disproportionally effect small farmers who would have to pay extremely high prices for small lot sizes. How does a small producer survive when the cost to test a 2 lb lot goes up to $1000? Had the labs been included in the SBEIS, I wouldn't have to be the one to say this. Why were we not included in the Small Business Economic Impact Study (SBEIS)? The Regulatory Fairness Act (RFA) covers all small businesses impacted by a rule set, regardless of licensee status, does it not? I don't recall seeing language in the RFA that specifies only licensees as being covered, but that any small business that is impacted by the cost of implementation. We are small businesses and we are impacted by the cost of this implementation. Why were we not included in the SBEIS? I should also point out that the work done by the CSTF will be drastically increasing the costs that the labs bear for testing. I need only point to the decision by CSTF to require the New York State Medical Cannabis Potency method to analyze cannabinoids. Current methods take roughly 9 minutes to run potency; this is pretty standard across the industry. With Department of Ecology implementation, we will be required to run a method that takes upwards of 18 minutes for the same chunk of data. This will decrease the number of samples we can run on a single piece of equipment per day by roughly 1/2, thus increasing our operating costs by 2x for this particular test. With just this example, combining these changes with the proposed lot size changes will have an extreme effect on testing costs for producer/processors. There are many other examples I can point to from the CSTF, but potency is the most obvious and I don't want to inundate you with examples that show the same trend. So how do we move forward? In the ideal case, we would have incorporated pesticide testing in the very beginning, because at that point the tax structure would have taken that testing into account. However, we are well beyond that at this point. The quickest and easiest way forward would be to change 1 small detail. Using the 50 lb lot size as an example, if the lab were to test all 19 samples, this would solve both the economic and the scientific problems I've outlined, from the lab perspective. However, then the large producer/processors would be disproportionally affected, so I would reduce the number of samples for all lots to be consistent with 1 per 5 lbs. Thus the 50 lb lot category would send in 10 samples and the lab	Pesticide testing costs affecting small producers / processors

				would test all 10. This maintains the status quo with regards to representative samples, which at least doesn't make things worse. The nuance behind this and third party sampling should be addressed by the Interagency Cooperative Team (ICT) that the CSTF has recommended be spun up, and for which there are bills in the current legislative session, with a high chance of passing. There are other options of course, to varying complexity and effectiveness. The ideal from my perspective would be to implement a line item tax at retail for any testing that is related to public health and safety (pesticides, microbial, mycotoxins, and water activity). The devil is always in the details of course, but some variation of the producer/processor pays for all the testing up front and is then reimbursed by the state who collects a tax when the product is sold. This tax would be outlined as public health testing on the receipt. This gives a very visible demonstration to the consumers who have a lack of trust in the system, that Washington State is taking the public health side of cannabis seriously, and would go a long way in returning trust in the system. Other ideas include variable lot sizes. This seems to me the most likely of compromises. From a statistics perspective, lot sizes should be driven by the variation of an analyte within the matrix (for the non-scientists among us, how much does the thing we are testing for, vary within the plant). In most applications, I can see pesticides being relatively consistent throughout the canopy due to the nature of application. I have done studies that show that this is not the case for cannabinoids, they vary significantly throughout the plant; but I have not yet done similar studies on variation of pesticides. I have shared this data with WSLCB in the past, and Nicolas Poolman, WSLCB chemist, was part of that study as my employee at the time. The result of this idea is that we do not necessarily need 5 lb lots for pesticides, but increasing lot sizes for potency or microbial testing does not make scientific sense. I could see increasing pesticide lot sizes and still maintain some semblance of rigor. This is still an added cost, but again, the labs do not exist in a vacuum. If you want to add mandatory pesticide testing to Washington State cannabis, prices will go up, because the lab costs go up. We can't just magically say "no pesticides", the equipment to run those analyses is hundreds of thousands of dollars for even entry level and the maintenance on this equipment is time consuming and expensive, not to mention the payroll costs of employing scientists who are qualified to operate the equipment. Should you have any questions regarding any of the above statements, or even to just chat about any of this, please do not hesitate to reach out. I can be reached at jeff@capitolanalysis.com, or via the lab at 360-918-8795. Thank you for your time, I appreciate the difficulty in balancing all of the various factors, since we didn't require pesticide testing initially. Your job is not easy, and I thank you for being there, working towards this common goal. It's just that the devil is in the details, and we need to get this right. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
36	*Email*	Clinton Zuber, Zoobees Inc	2/01/2022	Hello, my name is Clinton Zuber owner of Zoobees Inc, #412497. We have been in business with the liquor control board since August 2014. As a small business we have had our ups and downs, and at this point I'm finally seeing a future to be optimistic about. This new rule could drastically change that! We can not grow enough 50 pound lots to make it cost effective. This change would reduce our strain selection to a point where our product line may no longer appeal to our clients. We are strong believers in a pesticide free market and look forward to a different solution, one that does not put undue burden on the smallest producers and their employees. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments as the industry and labs adapt to the testing requirements necessary to promote health and safety. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing costs affecting small producers / processors
37	*Email*	Gregg Allen, Zoobees Inc	2/01/2022	My name is Gregg Allen, manager at Zoobees Inc, #412497. The CR102 proposed rule change raises a number of deeply concerning issues as written. The primary concern is that the ruleset may not be effective as written. It still relies on self-selected samples, where all other crops are required to implement 3rd party sample collection. These other crops are so required for a reason. Time has shown us more than once that self-selection of samples for pesticide testing is not optimal. Additionally, with so few labs able to perform pesticide testing this could severely diminish competition, leading to conglomeration and ultimately an overall reduction in the viability	Pesticide testing costs affecting small producers / processors, sample collection

				of these tests. Additionally, setting the maximum lot size to 50lb benefits only those who can produce 50lb lots of a like strain at a time. I would go so far as to state that the vast majority of Washington State cannabis producers cannot or do not do so. This increase in lot size without a mechanism for a sliding price scale based on true lot size could be disastrous to smaller producers. An increased lot size would result in fewer tests being performed. In order to maintain solvency testing labs would have no choice but to adjust the pricing per test to compensate, which leaves us with the very real possibility that mandatory QA on lots less than 50 pounds would cost more than the wholesale value of the product. A situation where both heavy metal and pesticide testing is done by random collection by WSLCB agents from finished products offered for sale would prove a useful stopgap measure. In theory, this would ensure both the safety of the citizens of the state of Washington as well as the financial health of our small cannabis producers while awaiting the agency coordination needed to have the testing overseen by WSDA/WSDE. Thank you. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
38	*Email*	Marilyn Olson, Integrity Labs	2/01/2022	Thank you for taking the time to read this. I am the owner /scientific director for Integrity Labs, LLC. The addition of pesticide testing to cannabis products is an important step in assuring safety to the end consumer and this is a welcomed addition. Rule change impacts such as testing cost increases, slower turnaround times, and misleading sample results are just a few of these changes that will occur and are not beneficial. Most importantly, the new rules do not provide for a safer end consumer product. In fact, the new rules will allow for less safety testing in all required parameters. • Large increase in sample size (pg. 2 of 16, #3 a,b,c,d,e,f) along with less testing requirements The current size required for cannabis flower testing is 4grams for a 5-pound lot. This is for the below set of required tests: *Potency (THC, THCa, CBD, CBDa)* *Microbiological Screen (Salmonella, E.coli and ENTC bacteria)* *Foreign matter inspection* *Water activity and moisture* *Mycotoxins (Aspergillus and Ochratoxin)* *Addition of Pesticides* The change will allow a 10-20lb lot (4,500-9,100 grams) as the smallest lot size. This means that up to 9,100 grams of flower (approximately 2,300 packages at retail level, considering 4-gram packages) will have 1 set of analytical results. As you can see this amount of product, that is not homogenous, will not be adequate to show overall safety for such a large amount of product. A 50 lb lot (22,680 grams) will also require 1 set of results for approximately 5,700 packages at the retail store. Currently we have plenty of failures of product due to not passing the microbiological screen and mycotoxin analysis. The increase in allowable lot size and lowered number of required tests is adding risk rather than furthering safety for consumers. This is a no-win situation for consumer safety as well as all small cannabis businesses. The small growers and processors (99.7%)will not be able to utilize the size change but will suffer the increased costs. Only the large (0.3%) of cannabis growers will be able to capitalize on these changes. The cost per set of required tests will increase drastically and the overall safety of the product will decrease. The appropriate way to test pesticides with the least impact on labs, producers and processors as well as the safest for consumers, would be to test is at the harvest/farm level. Most Washington State agricultural products (fruit etc.) are pesticide tested at farm level, allowing for more stringent testing if requirements are not being followed. • Test samples on an "as is" "as received" basis. (pg.8, 2.(e) • This needs further clarification. A 50lb lot as 19-1gram samples can not be tested as received.	Testing costs, delays in testing, lot size, impact on financial viability of labs.

				• No Small Business Economic Impact Statement to include the Certified Laboratories (pg. 4 of 7) As you can see in CR-102 WSR 22-01-055, no Small Business Economic Impact Statement was done to include the certified laboratories who do this required testing. These rules changes will have a significant negative effect on the laboratories as well as the 99.3% small cannabis producers and processors, these regulations also apply to. Where is the Small Business Economic Impact Statement including the certified laboratories, you are making new regulations for? According to Mr. Kildahl, "the WSLCB does not regulate the laboratories". If the WSLCB doesn't regulate these laboratories, who does and how do you justify setting regulations for them? Please call anytime or email with further questions. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
39	*Email and attached letter*	Dani Luce, GOAT Labs	2/01/2022	Thank you for providing the Cannabis Community the opportunity to comment on the Pesticide and Lot Size Changes. I am sure that there has been a number of differing views on what this looks like for everyone. Many of us in the Cannabis Community has a story on why we started our business, mine is because my oldest son was diagnosed with stage 4 cancer at the age of 19, we were using cannabis for appetite stimulation along with chemo. I have seen many rules that have changed along the way that I didn't agree with, like removing Yeast/Mold testing. Personally, I think that most of us that are on the scientific side are here because we believe in the science and many of us want to help the patients get safe accessed materials. So, on the laboratory side, I would like to point out that we are here to be the gatekeepers for SCIENCE in the cannabis community. There is a number of Scientific Task Forces that were created to help better the science that we are bringing to the table. I for one am in favor of standardized testing for cannabis, to help allow for legalization in all 50 states, when we get to that point. Additionally, I am all for bringing on pesticide testing. Which will increase the cost of testing no matter how you slice it. Purchasing the instrument ($500,000 - $750,000), developing methodology, paying your employees, trial runs all cost money. And until your method is developed, you won't be running those tests for clients, so you are doing it on your own dime. Again, I am not against brining pesticides on, however, I am against 50 lb lots for ALL testing platforms. The lack of representative sampling is going to be out of control, if this happens. I could foresee 50 lb lots for pesticides ONLY, and leaving the other required testing at 5 lb lots. The cost of testing will have to go up significantly. And had the Labs been included in the SBEIS, this could have been a foreseen change. Attached is my letter to the WSLCB. Thank you for taking the time to read it. *To Whom It May Concern:* *I have been having discussions with Jeff Kildahl since I was informed about the CR102 for WAC 314-55-101 – Quality assurance sampling protocols; WAC 314-55-102 – Quality assurance testing; and WAC 314-55-1025 – Proficiency testing. The Washington State Liquor and Cannabis Board (WSLCB) proposes amendments to current marijuana product testing standards to require pesticide testing for all marijuana produced, processed, and sold in Washington State, and randomized or investigation driven testing of marijuana for heavy metals.* *Mr. Kildahl and I have discussed at great length why the labs were left out of the Small Business Economic Impact Study (SBEIS). My interpretation of what Mr. Kildahl is trying to say is, the WSLCB doesn't license labs rather than "regulate" – so, I'm not sure that covers things under the Regulatory Fairness Act. As labs aren't licensed, they have always existed in an unusual relationship to the agency - and in this case the agency appears to be interpreting that relationship in a particular way as to not require inclusion in the SBEIS they have contracted with a vendor to conduct. It would be helpful to confirm all labs were excluded from the interviews Industrial Economics has been conducting. Mr. Kildal's explanation to me is as follows:* ***"We have not done a financial impact study for labs, but we are working with an economist who is creating a Small Business Economic Impact Statement to assess the economic impact on producers and processors as they are regulated by the LCB."*** *Not only does the LCB regulate us, we have now been assigned License Numbers, previously we had Certification Numbers – which were the number in which our lab certification was accepted.*	Financial impacts to testing labs, lot sizes

licensenumber	UBI	TradeName
7939083039	603324019	Confidence Analytics
4160154835	603547955	Medicine Creek Analytics
2603744569	603120434	Analytical 360 LLC
6607551758	603178980	True Northwest Inc
7397668881	603392242	G.O.A.T. Labs
4968985331	603364500	Integrity Labs
1285878302	603273920	Testing Technologies
3242088918	603400231	Green Grower Labs
8188925639	603617315	CAPITOL ANALYSIS
9734451004	604235046	Treeline Analytics
6406356371	603302909	Pacific Botanical Laboratories

Lab Name	Lab #
Confidence Analytics	3
Analytical 360, LLC.	4
True Northwest, Inc.	6
Testing Technologies, Inc.	7
G.O.A.T. Labs	8
Integrity Labs	9
Green Grower Labs	12
Medicine Creek Analytics	18
Treeline Analytics, LLC.	21
Capitol Analysis	22
Pacific Botanicals Laboratory	25

Now that I have that out of the way, here are my biggest concerns.
We run a SCIENTIFIC TESTING LAB, and what causes me real concern when the processor and/or producer is going to pull 19 1-gram samples, the lab will take 1 sample out of that and apply the results to a 50 lb lot. The variability between one plant and the next can be significant. You might as well be pulling potency numbers, bio results, MA and WA numbers out of the air. This is not a Scientifically representative sampling of that plant.
We just received the update from Gov. Inslee on 01/20/2022 saying the following:
"Number one; we decided to follow science and the data and our public health experts, and to be very vocal against the profoundly malicious efforts to not spread the truth about this vaccine that have been so damaging. Number two, we made a valued decision that saving lives was our first priority and it should remain unwavering. Third, we made the decision that the best way we could possibly reopen our economy was to knock down the virus."
"Now the question is did those strategies work? They worked big time and I want to talk to you about that," Inslee said.
https://medium.com/wagovernor/inslee-shares-washingtons-pandemic-story-with-u-s-house-covid-committee-c62955418caa
So, science is only important in certain cases?
My next concern is with testing methods changing, the cost of testing is going to change dramatically. It is going to cost the same for a producers and processors with a 2 lb lots as it is going to cost for a producers and processors with a 50 lb lot. With the changing times and the ever-evolving science as we progress into testing, the $100 test we are doing now, will be well in upwards of $500-$1000 per test. The SBEIS, that the labs were excluded from would have shown the IMPACT not only that the labs would be incurring, but how the IMPACT that the incurred costs that the labs will be taking on will affect the producers and processors. So, if you refer back to Mr. Kildahl's wording ***"We have not done a financial impact study for labs, but we are working with an economist who is creating a Small Business Economic Impact Statement to assess the economic impact on producers and processors as they are regulated by the LCB."*** *This is a false statement. Since, it does not represent the producers and processors and what cost they will incur when the labs increase prices.*
I would suggest that we keep 5 lb lots for the overall testing (potency, microbial, water activity and moisture), and make the pesticides into 50 lb lots. The application of the pesticides to the plant, the coverage should be fairly uniform. Without proper scientific data, we will not know that, until pesticides become required. As you may know, the cost of running pesticides is expensive, which is why no one has stepped up to do a large batch experiment to find out if the application of pesticides is uniformed or not.

WSLCB response: The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments

				that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
40	*Email and attached letter*	Sherman Hom, Medical Genomics	2/01/2022	This public comment is my second submission to the WA LCB concerning required microbial testing. (see attached) I hope that I made the deadline. As industry leaders in cannabis and pathogen genomics, we have spent decades working with quantitative polymerase chain reaction (qPCR) and culture-based methods for the detection of microorganisms. We are experts in the field with over 40 patents related to PCR and DNA sequencing based methods for detecting microorganisms. Kevin McKernan, Chief Scientific Officer at Medicinal Genomics Corporation (MGC) managed the Research and Development team for the Human Genome Project at the Whitehead Institute of Massachusetts Institute of Technology. He has over 46,212 citations related to his work in this field. Our scientists recommend the microbial testing specifications that will ensure that cannabis manufactured products are safe for patients. Due to our concerns for public health, we feel that the Washington Liquor and Cannabis Control Board should consider modifying the required rules concerning microbial testing of adult use cannabis (WAC 314-55-102 Quality assurance and quality control) [1] that describe the changes in required microbial testing of cannabis to reflect ongoing efforts at the AOAC, USP, FDA, and CDC, which are consistent with our findings at MGC. The presence of microorganisms is common in natural products, such as cannabis flowers. One must be able to differentiate between harmless and/or beneficial microbes ubiquitous in nature and those that are human pathogens that have contaminated the cannabis plant and/or manufactured products. Examples of human pathogens that have been detected in cannabis are Shiga toxin producing *E. coli* (STEC), *Salmonella* spp. (all species are pathogenic), *Aspergillus flavus, A. fumigatus*, *A. niger*, and *A. terreus* [2-16]. Current testing requirements for microbial contamination in states with medical cannabis programs are very diverse. Some states require a subset of the following tests: total bile-tolerant Gram-negative bacteria (BTGN), total aerobic microbial count (TAMC), total yeast and mold (TYM), total *E. coli*, and total coliforms. Action levels for each total count test for each product type are dependent on each state's rules. These action levels are in colony forming units (cfu/g or cfu/ml), which is the number of colonies that grow on the surface of an agar plate. On the other hand, California, Alaska, Oregon, Montana, and Vermont have adopted or have drafted rules that require testing only for the six human pathogens listed above with an action level of none detected per gram of product. Section WAC 314-55-102 (Quality assurance and quality control), Subsection (3) Quality control analysis and screening. The following analysis and screening are only required for samples that have not been previously tested, or that have failed quality control testing. (d) Microbiological screening. The sample and the related population fails quality control testing for microbiological screening if the results exceed the following limits:	Microbial testing

				For unprocessed plant material Enterobacteria (bile-tolerant gram-negative bacteria) ≤10,000 *E. coli* (pathogenic strains) <1 *Salmonella* spp. <1 For extracted or processed botanical product Enterobacteria (bile-tolerant gram-negative bacteria) ≤1,000 *E. coli* (pathogenic strains) <1 Our first concern is total count tests, such as Enterobacteria (bile-tolerant gram-negative bacteria) **do not** test directly for the presence of any human pathogens. The American Herbal Pharmacopoeia's *Cannabis* Inflorescence *Cannabis* spp. monograph [17] states that total microbial counts **must never** be used to pass or fail a cannabis sample. In other words, total count results **do not** provide any information about the presence of any pathogenic microorganisms in the cannabis sample, which may cause harm to patients. Moreover, approximately 25 bio-pest control agents that contain either non-pathogenic bacterial or fungal strains are available to prevent infection that could lead to reduction of cannabinoid yield or total crop loss. Required total count tests may cause cultivators to use toxic chemical pesticides instead of harmless biological agents. Therefore, we recommend that the Enterobacteria (bile-tolerant gram-negative bacteria) required test be removed. Our second concern is the required *E. coli* (pathogenic strains) test. CDC says that pathogenic *E. coli* strains are categorized into six pathotypes that are associated with diarrhea. [18] • Shiga toxin-producing *E. coli* (STEC)-most pathogenic of the 6 pathotypes and associated with food outbreaks • Enterotoxigenic *E. coli* (ETEC) • Enteropathogenic *E. coli* (EPEC) • Enteroaggregative *E. coli* (EAEC) • Enteroinvasive *E. coli* (EIEC) • Diffusely adherent *E. coli* (DAEC) Unfortunately, there is not a single test using either plating or molecular technology that is available today that has been developed and validated using cannabis as the sample type. Therefore, we recommend that Shiga toxin-producing *E. coli* (STEC) replace *E. coli* (pathogenic strains). The action level should be none detected per gram or per ml. Our third concern are the human pathogens associated with cannabis flowers that have already been documented in the clinical peer review literature [2-16], which cause pulmonary aspergillosis. The four pathogenic *Aspergillus* species (*Aspergillus flavus, A. fumigatus*, *A. niger*, and *A. terreus*) has been identified as the causative agents of this disease that leads to morbidity and sometimes death; especially for those that are immunocompromised.	

				Therefore, we recommend that these four human pathogenic *Aspergillus* species be added to the list of required testing for unprocessed plant material and extracted or processed botanical products. The action level should be none detected per gram or per ml for each of these 4 species. Our fourth recommendation is simply to change the action level for *Salmonella* species from "<1" to none detected per gram or per ml. Our last recommendation is that the the required microbial testing for medical and adult-use cannabis and cannabis products rules should include a statement concerning allowable methods to read: • A validated method using guidelines for food and environmental testing put forth by the USP, FDA, and AOAC Appendix J and cannabis as a sample type; or • (i) Another approved AOAC, FDA, or USP validated method using cannabis as a sample type." NOTE: "Another approved AOAC, FDA, or USP validated method using cannabis as a sample type" may include molecular methods, such as qPCR." The reasons for this recommendation are outlined below. **Currently there are limited AOAC, FDA, or USP approved species specific pathogen testing methods for cannabis.** Medicinal Genomics released the first version of our SenSATIVAx® (DNA extraction) and PathoSEEK® (qPCR assay) Manufacturer Validation Document in 2017. These method validations use cannabis as the sample type. At that time, there were no official guidelines published by any regulatory body describing how to validate a method for detecting microbes in the presence of a cannabis matrix. Due to this lack of available guidelines in the cannabis industry, our scientific team referenced guidelines for food and environmental testing put forth by the USP, FDA, and AOAC Appendix J. We continually add data to this document as we release new assays or make improvements to current assays. We are currently on version 31 of this document [19]. In addition, MGC's methods are currently going through additional validation according to AOAC's Standard Method Performance Requirements (SMPRs). AOAC has released 3 SMPRs for species specific testing for the species specific pathogens listed above (see #1-3 below). • Detection of *Aspergillus* in Cannabis and Cannabis Products https://www.aoac.org/wp-content/uploads/2019/10/SMPR-2019_001.pdf • Detection of *Salmonella* species in Cannabis and Cannabis Products https://www.aoac.org/wp-content/uploads/2020/07/SMPR-2020_002.pdf • Detection of Shiga toxin-producing *Escherihia coli* in Cannabis and Cannabis Products https://www.aoac.org/wp-content/uploads/2021/02/SMPR-2020_012.pdf Medicinal Genomics is a member of **AOAC's Cannabis Analytical Science Program (CASP) Microbial Contaminants Working Group**. The goal and objectives of this working group are to • Develop Standard Method Performance Requirements (SMPR) for cannabis and hemp • Extend a Call for Methods for each of the completed SMPRs • Empanel an Expert Review Panel to review candidate methods • Deliver consensus-based validated Performance Test Methods (PTMs) & Final Action Official Methods for the cannabis industry **NOTE:** Medicinal Genomics has a single AOAC Certified qPCR PTM for the detection of the 4 *Aspergillus* species, which was approved on August 10, 2021 and will have a single AOAC Certified qPCR PTM for the detection of *Salmonella* spp. & STEC by March 2022. The sample types for the Asp test are flower & infused products and will expand to include oils/concentrates & hemp by end of 2021. Moreover, the sample types for the Sal/STEC test will be flowers, oils, chocolates, and hemp. The primary advantage of using qPCR detection assays are that they are designed to identify unique short DNA sequences either shared by a "group" of bacteria, such as all *Salmonella* species and STEC subtypes or a specific genus and specie, such as the 4 different pathogenic *Aspergillus* species. If the unique sequences are present, then the qPCR test will detect it. Therefore, a qPCR test is very specific, very sensitive, and possesses a rapid turnaround time (6 hours) *vs.* plating methods that are less specific, less sensitive, and has a very slow turnaround time of days for colonies to form on a plate. Moreover, MGC has developed a method to remove the DNA from dead cells by using a DNA nuclease enzyme, incubation, & nuclease	

				inactivation step before amplification to detect only the DNA from live pathogens [20]. Furthermore, there are additional major disadvantages of using plating methods to detect bacterial and fungal pathogens. • Newly identified human pathogens have been detected in cannabis (personal communication) by qPCR, but not detected by plating systems, because the plates are incubated at a universal temperature (36± 1 deg C). Not all organisms grow at this universal temperature. The MGC DNA extraction method does not require incubation and therefore does not miss detecting these potentially harmful human pathogens. • The cannabinoids, which represent 10-20% of the cannabis flower by weight, have been shown to have antibiotic activity. Antibiotics inhibit the growth of bacteria in plating methods. *Salmonella* and STEC bacteria are very sensitive to antibiotics, which may lead to a false negative result. • Plating methods cannot detect endophytes [21-22], which are molds that live a part or all of their life cycle inside a plant. Examples of endophytes are the species specific *Aspergillus* pathogens and *Fusarium*. Methods to break open the plant cells to access these endophytes for plating methods also lyses these mold cells (killing these cells in the process). Therefore, these endophytes will not be able to form colonies in a plating method. • Selective media for mold plating methods, such as Dichloran Rose-Bengal Chloramphenicol (DRBC) reduces mold growth; especially *Aspergillus* by 5-fold. This may lead to a false negative result for this human pathogen. In other words, although DRBC medium is typically used to reduce bacteria; it comes at the cost of missing 5 fold more yeast and molds than Potato Dextrose Agar (PDA) + Chloramphenicol or molecular methods. These observations were derived from study results of the AOAC emergency response validation [23]. I thank you for your time and consideration. If you have any questions, please feel free to contact me. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. Thank you for providing information regarding microbial testing. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
41	*Email*	Colin Lukey, Yield Farms	2/01/2022	Thank you for the correction on labs that perform pesticide testing. In which case I'm hoping to add the following to my comments. At 5 labs who currently perform pesticide testing, that's only 1/4 of all the labs in the state. This still makes it very difficult for the over 1500 P/P licensees to get their product properly tested. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Number of labs testing for pesticides
42	*Email*	Dan Oliver, RDH ACO LLC	2/01/2022	I am writing to object to the CR102 Proposed Rule Changes, set to be discussed in tomorrow's public hearing. My comments, typed below, may be made known publicly and shared at said hearing if doing so may help influence correct action to prevent these proposed changes from going into effect. It is my strong opinion that more stringent testing requirements and practices can and should be implemented in a way that does not put the cost burden on the craft producers and small business operators whom are not typically the violators anyway. The proposed rules will make it much more expensive to produce small batch cannabis flower and concentrates. Mostly due to the proposed larger lot size allowance and how this will, in the long run, affect the per sample cost for testing, I believe that these proposed rule changes would aid in setting up an even more significant advantage for the largest players in our market and make it even harder for us small craft producers to survive in an already grim market environment. These proposed rule changes as they are currently written won't effectively address the problem of illegal or over use of pesticides nor will these changes add any accountability for any of the "bad actors" as these proposed rules allow for self-sampling and self-submission of samples for	Sample collection, pesticide testing for mixed lots, impact on small produces / processors,

				pesticide testing. Wouldn't it be crazy to assume that these same violators that are currently overusing pesticides or using illegal pesticides will then also somehow have enough integrity to submit representative unadulterated samples from their crops? Under these proposed rules they will simply continue their bad practices and submit clean non representative samples to skirt the new proposed requirement. I do not support and strongly object to the proposed rule changes as they are currently written and rather I support any one of the 3 solutions proposed below by the WSCA as I believe any one of these 3 solutions would better address the existing problems around product safety while avoiding the possibility of adding a significant cost burden to the majority of producers in Washington. ***Our Solutions!!!*** • *Keep current testing separate from pesticide testing. Adopt one of the following solutions as outlined in WSCA comments to the LCB* *1. Allow samples from current lot sizes to be combined into a single sample representing up to 50 pounds of mixed strains for pesticide testing.* *2.There is no reason to combine the two types of tests. WSCA recommends the regular I-502 QC tests continue with 5lb flower lot testing (or increase to 10 pounds) and test pesticides annually or bi-annually with random final product testing of finished products, as the WSLCB and WSDA currently conduct.* *3. Heavy metal testing is proposed done by random collection by WSLCB agents from finished products offered for sale. Pesticide testing could easily follow that path to ensure clean product while we await further agency coordination with the WSDE and WSDA who will eventually over-see testing.* In conclusion please do not proceed with these proposed rule changes as they are currently written. Please revise to address some of these problems and concerns expressed here and shared by many of my industry peers. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
43	*Email with attached letter*	Dani Luce	2/01/2022	I know a number of the labs have sent in their letters to the LCB. This is a quick little overview of how a few of us feel. We have had discussion on what these changes look like. Please read the attached document - This is in no way all encompassing. To Whom It May Concern: Several laboratories have started an open line of communication between us. This serious change in lot sizes is scientifically putting Washington at a huge disadvantage. Losing the ability to standardize and replicate scientific data will make Legalizing Cannabis in all 50 states almost impossible. The variability between plants is egregious, and to think that a 50 pound lot would represent the potency, the biologicals that grow on each plant or even the moisture content is absurd. However, with the application of pesticides I could possibly see something larger than the 5 lb lot working for the pesticides only, but again, without scientific data, we are still in the dark about this. Why were the labs left out of the Small Business Economic Impact Study (SBEIS)? What about the Regulatory Fairness Act? We just received the update from Gov. Inslee on 01/20/2022 saying the following: "Number one; we decided to follow science and the data and our public health experts, and to be very vocal against the profoundly malicious efforts to not spread the truth about this vaccine that have been so damaging. Number two, we made a valued decision that saving lives was our first priority and it should remain unwavering. Third, we made the decision that the best way we could possibly reopen our economy was to knock down the virus." "Now the question is did those strategies work? They worked big time and I want to talk to you about that," Inslee said. https://medium.com/wagovernor/inslee-shares-washingtons-pandemic-story-with-u-s-house-covid-committee-c62955418caa So, science is only important in certain cases? With testing methods changing, the cost of testing is going to change dramatically. It is going to cost the same for producers and processors with a 2 lb lots as it is going to cost for producers and processors with a 50 lb lot. The ever-evolving science as we progress into testing, the $100 test we are	Lot sizes, pesticide testing, impacts to testing labs

				doing now, will be well in upwards of $500-$1000 per test. The SBEIS, that the labs were excluded from would have shown the IMPACT not only that the labs would be incurring, but how the IMPACT that the incurred costs that the labs will be taking on will affect the producers and processors. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
44	*Email and attached letter*	Nick Mosely, Confidence Analytics	2/01/2022	Please see attached public comment regarding WSR 22-01-055 on December 8, 2021: Cannabis Quality Control Testing. I would appreciate an acknowledgement of receipt of this email and corresponding attachment. As the operator of an independent and certified testing laboratory under the scope of the Washington cannabis industry, I write this letter in support of the currently proposed Quality Control rule revisions pursuant to the public hearing scheduled February 2nd, 2022. Confidence Analytics is certified in good standing with the WSLCB for all testing regimens currently required under rule. Additionally, Confidence Analytics is certified for the optional tests “terpenes,” “pesticides,” and “heavy metals.” Furthermore, Confidence Analytics is voluntarily accredited by the widely recognized American Association for Laboratory Accreditation (a2la) a member of the International Laboratory Accreditation Cooperation (ilac) under the International Standards Organization (ISO) 17025 quality management system. Our laboratory maintains these additional accreditations voluntarily and at our own expense for all testing performed in our laboratory as a demonstration of our continued commitment to good, honest science in support of the Washington cannabis industry. While the current proposed rule changes are not perfect and are unlikely to completely satisfy all stakeholders, the rule proposal does take our industry in a positive direction. It is important to the safety of consumers and patients as well as to the integrity of the regulated market that Washington State joins its west coast peers in conducting routine pesticide screenings of inhalable cannabis products. WSLCB has been contemplating and broadcasting the pesticide test requirement since at least 2017, and now I believe it is time to implement. What the industry needs now is certainty. Certainty that pesticide testing is not just a concept, but a reality. For this reason I urge you to pass this rule change to the CR-103 step without delay. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Support for rule proposal
45	*Email and attached letter*	Jim Brewer, Exotic Farms	2/01/2022	I am writing you to oppose implementation of the current CR-102 regarding pesticide testing, because the lot size increases will lead to significantly higher testing costs as written. I am not opposed to required pesticide testing, but these cost cutting measures are anything but cost cutting and will result in much higher costs per test, which disproportionally effects the smaller producer/processors.As a Tier 2 Producer & Processor we have struggled through all changes and price increases. The way are farm is set up is to produce 5 to 10lb lots per harvest. This would be detrimental to us! Not to mention not as accurate for ttl cabbinoids testing. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Costs of pesticide testing, impact on small prodecers / processors

46	*Email*	Micah Sherman, Raven Grass	2/02/2022	The latest framework for quality control testing under CR-102 is the result of years of work towards implementing pesticide testing. Unfortunately, it still misses the mark on an effective and efficient testing program. It fails to meaningfully address a number of factors that I have provided comments on over the process. The attempt to offset costs by increasing the lot size for all components of QC testing is going to end up dramatically impacting small, craft producers and processors by limiting what is feasible for them to grow and test. This will only offset costs for large operators and processors. This directly contradicts the purpose and spirit of the required small business economic impact process. We must implement an effective program that doesn't benefit large, highly processed, homogenized products and processes over small batch, highly cared for and transparently made products from craft producers. There are ways to implement this testing that addresses this issue. Raven, our company, is predicated on small batches of unique cultivars that are harvested on a regular basis in order to provide unique offerings to meet consumer demands for all of the different products we are able to make as a result of that method of production. With these rules in place our business will not be viable. We will either have to fundamentally change our approach to production or go out of business. This is an existential moment for us. This suggested framework will decide for us; that we cannot continue on under such an arbitrary and impactful approach to testing. In order to get pesticide testing in place I would recommend not altering the current QC lot size or any aspect of the existing testing structure. There is ongoing work in multiple areas (social equity task force, lab standards bill being considered creating the ICT program) that can help to improve testing over the longer term. We should wait for this work to produce results before arbitrarily changing the framework for these tests by a factor of 10 without regard for the impacts that will have on business operations. We recommend allowing up to 50 pounds of flower or 50 pounds of concentrate to be tested in a "pesticide sample batch" that would allow for multiple strains to be sampled, homogenized and tested for pesticides together. There is no excuse to not allow small batch producers to be able to take advantage of the same scale of pesticide testing as large batch producers. There is no reason that pesticide testing must be done at a lot level framework. By only considering that approach it has limited the tools available, and a compromised system has been proposed as a result. I have still yet to have anyone at the LCB explain why we must test for pesticides in the same framework that we test for other things. There is no record keeping impediment to having different scales for different tests. We need better testing, and we hope to work with you to implement it. However, this proposal does not achieve what it hopes to do and will in fact reinforce the already deepening divide between the viability of highly processed products provided by large scale manufacturers and distributor analogs (processors) and Craft scale production that I-502 set out to support. This proposal, along with the continued preservation of a retail system that exploits the supply chain for the benefit of the very few at the expense of everyone else, will be the final nail in the coffin of small production in Washington state. Please consider changing these proposed rules to allow for us to continue to exist. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Impact of costs on small producers / processes, pesticide testing for mixed lots,
47	*Email and attached letter*	Scott Berka, Full Throttle Farms	2/02/2022	Please accept my written comments against the current CR102 as it relates to Lab Testing for Pesticides & Heavy Metals. My letter today is addressing serious issues about the current CR102 language and scope, and so therefore I am AGAINST the proposed CR102 Rule related to QC Testing. My name is Scott Berka, owner of Full Throttle Farms in Okanogan Washington. ○ I am a member of the Washington State Sun & Craft Association. ○ We are a producer processor of quality Sun Grown Craft Cannabis that has been in business for over 7 years. ○ We currently have 9 full time employees, down from over 20 in previous years (pre-Covid). ○ We have <u>proactively pesticide</u> tested at the harvest level for 7 YEARS. As an i502 Stakeholder, I wholeheartedly support pesticide and heavy metal testing. • At the harvest level, randomly collected by a State Agency or its contracted agent. At an industry minimum (standard), we need to make sure all regulated cannabis material being sold to WA retail customers is free from harmful substances. • This requires a rule that tests every farm, every year in order to meet the desired goal of the new proposed rule. Or why do it?	Sample collection, pesticide testing, lot sizes, impacts to small business

				The current language in CR 102 is well intentioned, but grossly incomplete: • In its desired scope. Iit doesn't address testing all farms equally; • Its understanding of the true impact on the Small Business's; and • The effectiveness of its ability to protect consumers in its enforcement across the entire industry. o EXAMPLE: allowing self-sampling selection by Producers for materials being tested for pesticides. o Not Testing all Farms equally My comments regarding excerpts from the actual language in Proposed Rule Making: • "Licensed Business…..that produce only flower marked for extraction would not be affected by this Rule." o So by that I am to deduce, that if I produce 1000lbs and sell it to a Processor it's not being pesticide tested? ▪ I'm assuming the LCB is aware and has reviewed recent Processor Pesticide Agreements clearly levying all liability to the Producer in the event material purchased from them tests hot for pesticides. ▪ How does this new rule accurately address or help track the possibility of cross-contaminated material purchased from other Producers. ▪ The LCB has a much larger responsibility to test all Producers material at the farm or harvest level, whether intended for retail or extraction. • I'm concerned about the completeness of the current CR102 language, or lack thereof, addressing sample sizes and mandatory pesticide testing for Processors producing oil extracts. o 50lbs lots sizes only applies to flower and not concentrates or extracted crude of any kind. o Was it the LCB's intention or mistake not to specifically reference guidelines for pesticide testing as relates to extracts in this rule? • "With recent increase in hemp-derived delta-8, delta-9, and other unregulated products entering the i502 market." o Why is this still happening? Hemp-derived delta-8 is not allowed in i502. o Enforcement action for intentional rule-breaking needs stiffer penalties vs the new LCB approach for unintentional infractions requiring education and corrective action and needs to be addressed in this rule. • 99.3% (1297 of 1306) of the businesses are considered small with only 9 meeting the threshold of over 50 employees. Over 70% of these businesses will be adversely affected by additional testing costs. • The Minor Cost Threshold of this Rule is $3466 and I don't believe this figure accurately takes into account the real world costs that will result from the implementation of this Rule. (Lab Testing Cost Increases, Lost Value of Small Lot Material, Bad Actors). o If QA Pricing is based on 50lbs lot sizes, how can the loss of sellable material and/or the disproportionate costs added to smaller lot sizes be quantified. o Smaller batch testing lot sizes, if tiered pricing will even be offered by labs (for small lot sizes), will become overburdened with disproportionately higher costs required for any and all lot sizes…..up to 50lbs. o This will eliminate almost any R&D effort by farms, as it relates to new strains or genetics, because pesticide testing charges will be cost-prohibitive for smaller lot sizes and the material will be unusable. o Delays with testing and meeting retail customer demands ▪ Less than half of the labs in WA have the $500K in lab equipment to run pesticide tests. • *This fact alone should cause us pause as we consider these proposed changes.* • *Which also means a step learning curve to learn how to use this equipment which will cause additional delays and costs to the small business.* o Other Language suggested that Producers "pass on increased testing costs (in the form of higher prices to retailers)"…..Have you guys meet our retailers? Not likely to happen. o Another excerpt from the final summary paragraph, "Overall, given the relatively low costs of the Rule compared to revenues reported for these businesses". ▪ The SBEIS study was based on 10lbs lots and not 50lbs lots. Therefore, the SBEIS conclusions are inaccurate and inconclusive and should not/cannot be used for the basis of decision making as it relates to this Rule.	

				▪ Testing Labs, were not included in the SBEIS and their proposed cost increases to address 50lbs lots could be substantial. ▪ Which businesses will have relatively low cost adaption of this rule? The 9 largest? ▪ Not the 99.3 % who most don't even produce a 50lbs lot of material in a specific strain in a given year? ▪ What happens to the last of the material from a given harvest of a specific strain? Say the last 20-30lbs? • Do I just waste that material because testing costs would be to high. *Proposed Solutions* We understand the pressure that Washington State and LCB are under to address pesticide testing in i502. I agree we need to implement proper rules that fairly address and equally spread the costs across the entire industry. But for now we still need to make a living and adding costs to small business because of a hastily thought-out remedy or rule is unconscionable at this time. • Don't implement a rule that is based on a SBEIS report that utilizes data that is knowingly incomplete and inaccurate. • Keep QA lab testing separate from Pesticide and Heavy Metal testing. • Pesticide testing needs to occur at every farm equally to eliminate bad actors. • Pesticide testing needs to be conducted by the LCB or Agent of the LCB to prevent loopholes in self-selection. • Address testing lot sizes for Processors. • Increase lot sizes to 10lbs. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
48	*Email with attached letter*	Jeremy Moberg	2/02/2022	Please see my comments re: the CR-102 rulemaking on QC. As an owner and operator of a small business in the state regulated Cannabis industry I have grave concerns over the proposed QC rulemaking. While I appreciate the work the LCB has done to implement pesticide testing, and hope that such testing can be adopted into rule, the proposed rule will be a devastating blow to already struggling small businesses. The Small Business Economic Impact Statement (SBEIS) found that there will be a significant impact on small businesses. The SBEIS concludes that for businesses such as mine that test flower and intermediate products that an increase in testing costs of 2.1% of annual revenue would result in annual increase in cost of over 25,000 dollars. The SBEIS states that the rule revision would "provide the ability for license holders to test larger amounts of flower with a single panel of I-502 tests would reduce these estimated costs". However, the SBEIS did not assess the impact of increased costs of testing due to a decrease in the volume of testing. The SBEIS again on page 1-3 claims that "The increase in the maximum amount of marijuana flower that may be tested with a single I-502 panel of tests would not increase costs to businesses, but instead would decrease costs for some businesses that would be able to test larger amounts of flower with the same number of I-502 test panels, reducing existing testing costs." The decrease costs to 'some businesses' would reduce costs only for the largest businesses. In fact, the smaller businesses would bear the most increase in costs. The SBEIS analysis is correct, this rule will decrease costs for large businesses and increase costs for small businesses. State licensed labs have provided comments indicating that there would be a major increase in I-502 panel testing if in fact licensees took advantage of the larger lot sizes. While this may still benefit the larger producers that are able to take advantage of large lot sizes, it would overall further increase the costs of the I-502 panel that would disproportionally impact smaller producers. I believe that if the SBEIS had accounted for the increased costs due to the drop in volume of testing, the impact to small businesses would be much greater than the already significant impact of 2.1% of annual revenue identified in the SBEIS. If this rulemaking is adopted as is it would also have the immediate impact of reducing the number of labs in business, and thereby reducing competition. Labs that are not equipped and certified to conduct pesticide testing will become non-viable businesses immediately. No licensee is going to send samples to a lab that then is going to send that sample to another lab for pesticide testing due to the increase in turnaround times. Labs licensed to conduct pesticides testing for competitor labs have no incentive to prioritize those samples, and no doubt would prioritize testing for their customers that test the full -502 panel directly with them. The SBEIS did not consider the economic impact of consolidation and reduced competition among labs.	Cost of pesticide testing, mixed lots for pesticide testing

				I believe that the SBEIS conclusion that pesticide tests will range from $60 to $150 to be incorrect. One of the two labs certified to conduct pesticide testing has recently advertised the proposed testing would costs $250 dollars a test. My operation specializes in small batch flower and concentrates. Many of my batches of concentrates are in the range of 250-500 grams. Using the $250 test, each gram of concentrate would have imbedded in it .50 to 1.00 a gram in testing costs. Alternatively, large companies that use highly processed and highly potent distillate in their concentrates, with no limit on concentrate batch size could see their testing costs reduced to just pennies per gram. This creates a situation where the largest companies will benefit from this rule change and the smallest will be economically burdened. I ask that the LCB make changes to the current proposed rules to lessen the impact on small businesses. I believe that pesticide testing can be adopted that does not disproportionately disadvantage small businesses with some minor changes to the proposed rule. Please consider maintaining the current I-502 panel of testing for every 5 pound lot, and create a 'pesticide sample batch' that is a composite sample of multiple lots up to 50 pounds. I believe such an approach would avoid a major disruption to small businesses that is almost certain under the proposed rule. I also believe that in coming years more collaboration with other agencies will result in a comprehensive approach to testing in the cannabis industry. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
49	*Email and attached letter*	Ryan Sevigny	2/02/2022	Please see my comments attached regarding the QC CR-102 proposed rules. Good Morning Chair Postman and Board member Garrett. Thank you for engaging with us on this issue and Chair Postman, if I might say – quite the article in the paper yesterday and I appreciate your perspective. My name is Ryan Sevigny and I'm a T2 farmer located in Oroville, WA. I'm a board member with the Sun & Craft Growers Association and an adjunct board member with the Cannabis Alliance. I wholeheartedly support the adoption of rule that would establish pesticide testing for our industry and appreciate the intent and hard work of the LCB to draft rules surrounding this issue as I believe Washington state customers have the right to know how their cannabis is grown and they should have the utmost confidence that products on the shelves are safe to consume. This set of rules gets closer to achieving those goals but still misses the mark. • The SBEIS did not consider the economic impact of the labs as they are not stakeholders but in this rule set, they would be significantly impacted financially. Ex. Expensive equipment to purchase, reduce number of tests administered. o Only 5 of the 11 certified labs are listed on the LCB frequently requested lists. The labs that have not been able to make the upgrades needed to test for pesticides must send samples out to one of the certified labs which will soon lead to a consolidation amongst the labs. The smaller labs will not be able to compete as their model will run into increase cost, pricing them out of competition and create long delays in receiving results back from 3rd labs thus pushing out of the industry. • The survey that the SBEIS relied on for many of its assumptions discussed only a change from 5lb lots to 10-pound lots. It does not adequately address the impact of allowing a single test to represent up to 50 pounds. Comparing the responses to a proposed increase to 10 pounds is not transferable to an increase to 50 pounds which will certainly lead to increased costs as labs reduce the number of tests processed. • Small craft producers will not be able to benefit from sampling from larger *'quantities of marijuana flower'* and will in fact be worse off relative to their larger competitors if these changes were implemented. Only producers and processors with the scale needed to batch and test large amounts of a single strain will benefit from this theoretical cost saving. • The proposed rules implementing a system based upon self-selection of samples for pesticide testing goes against widely adopted standards for similar testing regimes administered by WSDA. Testing for pesticides using self-selection of samples lacks credibility as it can be manipulated and cheated by unscrupulous players. It is hard to expect that a system meant to catch violators using illegal pesticides would work if it relied on those very violators to select their own samples. I believe these changes are possible to fix and shouldn't add any more than an extra 30-day extension to remedy. I would like to offer a suggestion for a solution that would help address the previous points. Un couple the 502 panel with pesticides test and allow pesticides to be handle in a similar manner as heavy metals with third party-based sampling. Using an approach like this will help avoid a devastating outcome for the small farmers of this industry.	Sample selection, impacts on small producers/processors, economic impact on lab, pesticide testing like random heavy metal testing

				WSLCB response: The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
50	*Email*	Mark Ambler, Breeze Trees	2/02/2022	As a follow up comment, it appears the rules as written ban THC balanced in ethanol sales due to a concurrent limit and sampling requirement on the product. We would disagree if this is the case. THC in ethanol is a good wholesale product for edibles. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. The limit for THC in ethanol in the proposed rules is 5,000 parts per million. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Residual ethanol action level
51	*Email with attached letter*	Vicki Christophersen, Christophersen Inc.	2/02/2022	Please find attached our written comments as follow up to my testimony this morning. The Washington CannaBusiness Association (WACA) represents Washington's licensed and regulated cannabis and hemp businesses. As the oldest trade association for cannabis and hemp businesses in the state, we are committed to establishing a safe, quality-controlled, fully regulated system that strives to keep cannabis out of the hands of children. We value our collaborative relationship with the WSLCB and appreciate the opportunity to work together and to provide feedback on the CR 102 - Marijuana Quality Control proposed rules. First and foremost, WACA believes that these rules should be adopted as soon as possible. Quality Control Testing Rules are fundamental for the health and wellness of cannabis consumers. Scientifically evaluated products should be a point of pride for the entire system because we can validate them as safe, and therefore reflective of the experience and values of cannabis professionals in Washington. We acknowledge that there is tension built into the fundamental relationship of the regulator/regulated but surely, on this point we agree: that consumer safety is our highest priority, and that testing to assure consumer health and confidence in Washington's products should be one of the most bedrock values of our system. As the industry evolves, adopting these rules establishes a long-overdue foundation that centers consumer health and safety. A landscape that changes rapidly with influence from escalating domestic and global competition, emerging technologies, shifting politics, and evolving science is grounded by testing, and the verifiable boundaries we safeguard around consumers. It is unnecessary to be led by the mystery or conspiracy of the unknown. A part of being regulated in Washington should be a tested, transparent confirmation of product excellence. If testing reveals shortcomings, the issues can be identified and corrected. Our feedback includes some technical input from our membership. 1. Under **WAC 314-55-102 (1)**, we would request a specific stipulation that labs disclose their subcontracting activities to licensees. Some labs choose not to disclose that they DocuSign Envelope ID: 59C90DD3-E0C7-4855-8E07-62CD9BDD3950 subcontract, leading to confusion, processing issues, and delays. If all labs initially subcontract for pesticide testing, and only one or two labs in the state are accredited, there will be delays that can be compounded by unanticipated problems such as equipment issues, and serious "backups" that have a substantial impact on the entire industry. We strongly request that subcontracting must be a required disclosure to licensees, lending transparency that informs business decisions. Proposed language:	Rules should be adopted. Referencing of samples should be disclosed by labs. Heavy metals testing should be required for all products.

				WAC 314-55-102 (1) Lab certification and accreditation for quality control testing. *(d) Subcontracting must be disclosed immediately and recurrently to the board and all licensees that engage in testing with a certified lab.* 2. **WAC 314-55-102 (3) (g)** - this section states that heavy metal testing is optional for non-DOH compliant products, and subject to random or investigation driven testing WACA feels strongly that heavy metal testing should be required for *all* products, as it is in almost all other states. This is critical to protecting public health and safety and this requirement is well overdue. WACA's advocacy is driven by a member-developed policy agenda. We respect the hard work of the agency and after four years, support adoption of these rules. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
52	*Oral Testimony*	Lukas Hunter	2/02/2022	Good morning hey well Lukas Hunter representing harmony farms thank you for the opportunity to have four minutes to talk I'm used to two minutes now from the legislature so anyhow I just want to say first and foremost thank you for taking the time on this set of rules it's been a lengthy process but it's also a very challenging set as we're balancing public health and safety economic survivability for businesses and labs so there's a lot going on there I have submitted a written testimony already to the rules and policy staff I'll forward that to you guys as well but ultimately harmony would like to see lot sizes actually decrease down to five pounds as opposed to raised to 50. What we see is disproportionately affecting smaller businesses and putting excessive tax labs will most likely raise the cost of QA testing to a standard for a test regardless of the lot size what we would like to see is actually a harvest level test where at the because harvest is already defined within rule to take a representative sample from the harvest I suggest three grams just because that's what's required whatever amount of samples that would take and then to apply a charge for pesticide tests at harvest level I think that this would be the best way to allow for a even even taxation on the cannabis industry and it won't promote larger lot sizes it'll promote ability to have smaller lot sizes as well while going through this rule set I also have seen other pain points one that we've seen is once you pass your mandatory QA test an inability to retest in the form of remediating a product further so let's say for butane you have a ppm maximum of 5000. well if you pass at 4900 you can't further refine that product and re-retest it because it's already past QA testing well that passing test result may not meet you know standards for a company so what we would like to see is ability for licensees to autonomously be able to re-test and further refine product for pretty much everything except for potency and this is really just to improve the product safety out there also as a back end of this it would allow for licensees to not have to pay for non-mandatory tests to preemptively see if their product meets quality standards so those are the two main things another one is if there would be an ability for once again autonomous testing retesting if a licensee were to fail QA testing once again I in my submitted testimony I talk about the way that Colorado handles this with us providing two additional samples from the same batch or lot and then allowing those to go to separate labs or to be re-tested at the same lab that's fully detailed out but I think that that would be more robust system once again allowing it to reside within the industry side to allow for more rapid turnaround as opposed to making requests of the liquid canvas board and once again this is intended to further reduce the taxation of non-mandatory tests to make sure product meets internal standards as well as state-provided guidelines so trying to keep testimony as short as possible I wrote a whole novel for you guys so you're welcome thank you so much. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Harvest testing for pesticides, voluntary/desired retesting by processor, remediation
53	*Oral Testimony*	Shawn DeNae	2/02/2022	Good morning everybody and thank you for this hearing and I also need to give a big shout out to you Mr. Postman for your rebuttal that was recently published in the Tacoma tribune thank you for that spot on glad to see it so when this CR 102 was represented right before thanksgiving	Keep pesticide testing separate from i-502 testing, sample

				with the small business economic impact study today seemed like it was far off here here we are all of a sudden here you know we faced the holidays and the surge of omicron and and you know it waved through our community then we had the CCRS to deal with all the cannabis bills to prepare for the synthetic bills that just really freaked us out took a lot of our our focus and you know and the other bills that are important to us like the commission and the craft cannabis endorsement and now here we are on a vital topic that will affect us all while we're trying to run our small businesses so so forgive that all the comments came in kind of late and hot and heavy but that's just how it worked out basically I'm I'm a little tired and overwhelmed you know and i'm seeking simplicity so the kiss theory seems to be the simplest to me and what I want to ask is you know what if we separate the pesticide testing from the regular QA there's no need to combine them together what if we expand upon the third party collection that the LCB is currently doing and sending tests to the WSDA what would happen if we expanded upon that and you know because the the the word on the street is Washington doesn't have any mandatory pesticide testing program but we really do the LCB came through my farm last fall collected samples sent them into the WSDA for pesticide testing it's it's concerning that this rule set is still based upon self-selection you know it comes down to a trust issue we've seen that there are players in this industry that just cannot be trusted and by creating a huge loophole for self-selection that does not ensure that our products at the end shelves are safe the only way to ensure that is to do robust final end product from the store shelves taken by third party sent to the WSDA lab and tested thoroughly for pesticides we already have that program in play and I would like to keep it simple and just make that current program robust the current cr-102 already relies upon that sort of system for heavy metals heavy metals are are proven to be completely unsafe when consumed so if that method is okay for heavy metal metals then it ought to be okay for pesticides you know we saw with the small business economic impact statement that the current proposal would negatively affect 72 percent of us I think that's that's a little low but but all the same with the amount of tax revenue on your cultivators 30 seconds okay all right I'll wrap it up we also need to address the 5000 ppm for the butanes hexanes propanes that's way too much industry standard is well under 500 so let's move to a lower standard and I also have a question about the usage of the term test samples from larger quantities of marijuana flower the term lot is not used so I wonder if that is meant to allow us to combine several strains that represent up to 50 I just can't be clear thank you so much I appreciate it **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	selection, action levels for residual solvents
54	*Oral Testimony*	Scott Berka	2/02/2022	good morning ladies and gentlemen and members of the board my name is Scott Berka owner of full throttle farms in Okanagan Washington I'm a member of the Washington state sun and craft association we've been in business seven years as a sun grown craft cannabis producer we have proactively pesticide tested at the harvest level for seven years I'm here today to speak against the proposed CR 102 rule related to quality control testing in its current format as an i-502 stakeholder I wholeheartedly support pesticide and heavy metal testing at the harvest level randomly collected by a state agency or its contracted agent at an industry minimum we need to make sure all regulated cannabis material being sold to Washington retail customers is free from harmful substances this requires a rule that tests every farm every year in order to meet the desired goal of the new proposed rule or why do it the current language is well intentioned but is incomplete for a number of reasons in its desired scope it doesn't address testing all farms equally in its understanding of the actual financial impact on small businesses because of its incomplete conclusions in their SBEIS analysis in its ability to protect consumers and its enforcement across the entire industry why does this rule allow self-sampling selection by producers for material being tested for pesticides and not testing all farms equally an excerpt from the actual CR 102 licensed businesses that produce only flower mark for extraction would not be affected by this rule the LCB has a much larger responsibility to test all producers material at the farm or harvest level whether intended for retail or extraction if QA pricing is based on 50 pound lot sizes how can the loss of sellable material under 50 pound lots be quantified most small producers don't grow enough to fill a 50-pound lot in a year less than half of the labs in Washington have the necessary lab equipment to run pesticide tests equipment which would require a steep learning curve and time to become experts in the use of this fact alone should cause us pause as we consider these proposed rule changes we are just not ready in other rural language it suggested that producers pass on increased testing costs in the form of higher prices to retailers have you guys met our retailers not likely to happen the SBEIS study was based on 10 pound lots and not 50 pound lots testing labs were not included in SBEIS and proposed cost increases to address 50 pound lot sizes could be substantial therefore it should not it cannot be used for rulemaking in its current form proposed solutions we understand the pressure that Washington state and the LCB are under to address pesticide testing in the i-502 I agree we need to implement proper rules that fairly	Sample collection, lot size, pesticide testing

				address and equally spread the costs across the entire industry but for now we still need to make a living so adding a disproportionate non-recoverable cost to our small businesses because of a hastily thought out remedy or rule is unconscionable at this time don't implement a rule based on a SBEIS report that utilizes data that is knowingly incomplete and inaccurate keep QA keep QA lab testing separate from pesticide and heavy metal testing pesticide testing needs to be conducted by the LCB or an agent of the LCB at every farm to prevent loopholes and self-selection add language for QA testing for lot sizes for processors and increase slot sizes to 10 pounds thank you very much for your time today **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
55	*Oral Testimony*	Mark Ambler	2/02/2022	My name is Mark Ambler I'm a tier one producer processor up in Bellingham and I I'm opposed to these to this rule because I don't use any of the pesticides that are on the list the banned pesticides and like the five or six percent of the approved pesticides that are on the sampling list i don't use any of those so to tell me to sample for those and then tell my customers that this product has been sampled for pesticides it's misleading and for those that have gone all the way to using just like beneficial insects or no pesticides at all just having such a clean facility that they don't need to use pesticides to make them sample for things they don't use and for things that you guys have checked you guys came to our facility and checked that we don't have those things anywhere in our facility we opened all the all the cabinets so you have a program in place to keep disapproved pesticides from getting applied to cannabis in the market I don't think adding testing for all cannabis in perpetuity um really helps and it it dis-motivates people from going to beneficial insects it dis-motivates people from getting rid of pesticide use because why not use pesticides if you gotta test for it anyway just don't use the ones that are on the list right so there's a lot of issues here and i there's also the legal issues so say if we did use one of the pesticides that you're you wanted us to test for and we followed the label instructions um everything's recorded you know on on security cameras so we're following instructions we're we're keeping records per label and it doesn't pass the test at the end what's the what what do we do we can't go back to the best side company and be like you guys got to change your label because it's wrong for cannabis you know there's no legal recourse so so it's a really a big issue and this is the starting point of that long big issue so if you fix it now you won't have that 20 years from now where this is a huge problem and that that's essentially my comment I'll give more time to everyone else thanks appreciate it **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing
56	*Oral Testimony*	Gregg Allen	2/02/2022	so good morning to the board my name is Greg Allen with Zooey's a tier two producer processor at Liberty Lake we've been in business since august the first 2014. mostly I'd like to echo Scott Berke from full throttles comments he's a lot more eloquent than I am we have serious concerns around the more or less fixed testing costs per panel the cost per panel it's not going to change with lot size unless some guidance is handed down to allow for that if a five pound lot costs the same to test as a 50 pound lot it's gonna be hugely detrimental to anybody who's not able to meet that 50 pound mark on the topic of the pesticides themselves pesticide testing is great I would also like Scott's comments that should be handled at the harvest level by LCB agents or opponents of LCB beyond that I have a little ad that Scott I think nailed it for all of us and in the interest of time I think I'll I'll close off there great thank you appreciate it **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Impacts to small producers / processors, harvest level testing for pesticides

57	*Oral Testimony*	Micah Sherman	2/02/2022	hi good morning thanks so much my name is Micah Sherman I'm a co-owner of raven we're a tier two producer processor here in the Olympia area and I'm also joining you today to ask for some re-evaluation of these rules as proposed I'd like to reiterate the comments made earlier about the implementation of this significantly larger scale of testing of the 50 pound lot over the years my comments on this rule set has always been that we need to start separating the individual tests and do those tests at the scale that they make the most sense so some things make sense to do at the strain lot level some things make sense to do at the harvest level some things make sense to do at the farm level this particular pesticide sampling I think could be very effectively done at either the farm or the harvest level one thing I'll bring up that hasn't yet been mentioned is we have testing that needs to be done for disallowed pesticides that has a completely different set of considerations than tests for allowable pesticides and right now the rule set doesn't really distinguish between the method of sampling and the method of tracking those different compounds which do have much different considerations and much different concerns so I worry a bit that that aspect of the rule set is not fully developed and it leads me to believe that we need to to work more with our experts at the WSDA which I know there's a bill going right now that's going to help with that process and I think that we have quite a bit of work left to do here to get this right our organization the WSCA has proposed some some options that could allow us an intermediary stage where we can start testing for pesticides at a broader scale and and then work to refine that I think we have work left to be done here we do want to get some sort of pesticide testing into the system but as it is right now just for example for my business this would more than double my grow 50 pesticide of hardly any strains even in the course of a full calendar year my business model is entirely based on small batch craft cultivars this would make it so my business model is not viable anymore this would make it so the research and development that we do for new strains would not be viable to be able to actually do that and have it be something that we could afford to do so this is really going to going to hurt our ability to to innovate to breed to come up with new strains and all of that work is really important it's already very hard and difficult to do financially our margins are very very slim and this will put us into a position where we just really can't afford to do our craft business models anymore and we need this rule set to apply equally in the compliance costs whether you're a giant person making a completely homogeneous highly processed product or a small batch person that's making one-off lots and so we need to figure out a way to make sure that these compliances are evenly spread across all of those different business types and I think it's worth spending a little bit more time to get it right and we're here to do that with them thank you **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing at harvest / farm level
58	*Oral Testimony*	Jessica Straight	2/02/2022	hi thanks for thanks for taking my testimony I'm multitasking here I was on my headphones trying to deal with a bunch of stuff so I just ran into my office so anyway I'm Jessie Straight and together with my brother we own eagle trees it's a tier 2 producer processor up in Bellingham near Bellingham between Bellingham and mount baker and I'm just wanting to talk to talk about this testing stuff already so many rules that have been that have taken effect have hurt us financially we're a really small business we gross less than 500 000 a year and with that we have to pay quite a lot of costs for example we we get about less probably around 30 of the cost of our products at retail to compare that to what the state gets is about 47 of the retail cost of of the product that we work so hard to produce that doesn't sit quite right with me truthfully that the state makes more money on our products that we that we create through our blood sweat and tears that just doesn't sit right with me and then to create a bill to create more costs for us that we have to pay is just I think it's just ludicrous I think that along with all the other speakers that have so far spoken the five pound lot makes a lot of sense for what you know for what we're doing now for potency and whatnot the pesticide test makes more sense on a harvest or farm level along with the heavy metals we personally we don't use any pesticides at all we use no chemicals we use it for chemical fertilizers we use nothing we use no products whatsoever on our products so actually we would love the state to test product for pesticides and heavy metals that would allow our product to stand out in the marketplace that would be great and for the amount of money that our industry is providing for our state I think we could earmark just a little bit of that get a little a little group going that would go and buy product at the shops because that ultimately is what people are buying that is the health and safety what people are actually buying at the actual shops so in order to keep those products safe I think there needs to besome kind of group through the LCB or the state or whatever that test those products on the shelf to make sure they're safe because that's ultimately what all we all want we want safe product for the consumers we want safe products for the consumers because as the cannabis industry we want to continue to create good name for ourselves and the state wants to protect protect the consumers so I think we're all in agreement what we want it doesn't make any sense whatsoever sorry that's my puppy it doesn't make any sense whatsoever to allow people players to self-sample because the bad actors are gonna act badly we all know that	Financial impacts, pesticide testing at farm level, testing products from the shelf,

				so we can't leave it we can't leave it as an honor system we just can't especially for pesticides and heavy metals that are actually going to affect people's health potentially so it really needs to be at the farm level great and at the the retail level secret shop get in there by product and test it for pesticides and heavy metals it makes the most sense and I just agree with I agree with a lot of people that came before and I think that's pretty much all I have to say thanks so much for taking my my thoughts **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
59	*Oral Testimony*	Jeremy Moberg	2/02/2022	good morning thank you board members for the opportunity to comment on what is really an impactful set of rules on the industry and particularly on small businesses my name is Jeremy Moberg I'm the owner of Kennesaw farms and a board member of the WSCA I do want to commend the LCB on the conduction of the small business economic impact statement this is the first time that I think we've seen a small business economic impact statement that really dove into the impacts on small businesses and I think its findings are are interesting I think they basically state that there is a disproportionate impact to small businesses some of the small business impact statement seems to rely on these larger lot sizes as a mitigation effort against that but it actually has the opposite effect large companies will utilize the 50 pound lot size and that will just and that will decrease overall testing that labs are conducting which will resume which will result in increasing costs from lab we've heard testimony from lab written testimony conversations with labs that if the large players adopt the 50 pounds that they will actually in order to cover their costs have to increase the costs on all cannabinoid testing and that's disproportionately going to injure small farms as they cannot take advantage of the larger lot sizes I think we all agree that we need pesticide testing and I and sooner than later I'm hopeful that we can make some modifications in a single extension of this rulemaking that could satisfy the need for pesticide testing while acknowledging other efforts within the legislature and the fact that we're moving towards a more broad governance of this industry that is going to include input from agencies that traditionally handle these sorts of testing requirements the other thing that the SBEIS asserts is that small businesses will take advantage of these larger lot sizes and that's just not true and asking farms to change their practice and act like a big farm when they're a small craft producer is is really not a not a practical suggestion another big issue here is that we don't have very many labs that are able to do this testing right now and effectively on day one of this rule going into effect we're going to lose over half of our labs there will there will be no reason to send a sample to the lab that I currently work with to northwest who does not have the capacity to adopt pesticide testing I would not send them a sample only for them to package that sample up and send it to one of their competitors and then their competitor is gonna are they gonna prioritize that sample above their own samples thank you so that's a big big consideration another consideration that I really think we need to look at is there doesn't seem to be a provision for any sell-through and this would be huge debt hugely judgmental and chaotic for the industry as you know I have a 50 grams of a lot extract lot left and I now have to go get that pesticide tested our solutions are varied but the biggest one I think is that we could create a batch system a pesticide batch system where individual lots could go together and be tested and so we have some suggestions out there I've also written testimony so I thank you for your time and your consideration on this issue **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Pesticide testing, lot size, impact on labs
60	*Oral Testimony*	Joshua Rutherford	2/02/2022	hi there thanks I'm Joshua Rutherford I own a tier 2 producer processor by myself and I work it myself I ought to be truth be told I haven't had a chance to go through these rules I'm going to you know emulate a lot of the thoughts that have come up but I fully support pesticide and heavy metal testing in our industry and I think that it could be achieved in a different way looking at seasonal for for outdoor growers testing their soil and and coming by and getting a seasonal leaf sample would be sufficient and you know maybe for indoor or greenhouse cultivation doing it per crop rather than throwing the thing on on the on the final product for the producer and then also I agree with Jessie you know a secret shopper program would be in invaluable I mean we do have a ton of excuse my language shitty pesticide laid in product on the market and it is an issue and I think we need to meet the standards similar to California because as we look forward to federal legalization we need to be on on point or we're going to be stuck you know only able to move our product within states so I appreciate the efforts but I think that we need to have better	Pesticide and heavy metal testing, testing products from shelves

				discussions with farmers you know and really suss out the best way to approach it to be a successful program for everybody so I'll keep it short and sweet I'd be happy to contribute if you guys have questions I I'm you know involved in the industry I'm driving back from California right now after having given a seminar so thanks for the time guys **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
61	*Oral Testimony*	Ryan Sevigny	2/02/2022	good morning now we should be good there we are yeah thanks for taking the time to review this very you know robust issue I think we see with the attendance today that there's a lot of opinions and I think there's a lot of opinions on the same side of the table and so I've already emailed my comments and I'll kind of keep them short here because I don't want to continue to reiterate but good morning Chair Postman and Board Member Garrett my name is Ryan Sevigny and I'm the owner of a tier 2 sun grown farm I'm also a board member of the Washington sun and craft association and an agile board member of the cannabis alliance and just like you've heard today from a multitude of people I wholeheartedly support the adoption of pesticide testing I think our industry and the patients definitely need to have peace of mind when they go to the the retail stores and to know that the products on the shelves are safe however as you've heard you know I think there is a lot missing from this rule set I also want to commend Kathy for her diligent work on on all these issues she's fantastic but just to kind of quickly bullet point my comments the small business impact statement you know did not consider the the economic impact on the labs they're not stakeholders and so I think from that standpoint a lot of the data set is skewed as we're not seeing the full picture I think I've heard him mentioned here that less than half five of the 11 labs in the state are able to test for pesticides and I got that from the frequently requested lists on your website I think there might be one more coming online or something but you know those five labs are definitely going to have a large head start and I do think that there's going to be consolidation as Jeremy eloquently illustrated in the the supply chain if he were to continue testing with true northwest the small business impact survey also had assumptions based on 5 and 10 pounds and not 50. In fact when I participated in that survey 50 pounds was not mentioned to me at all it was all conducted in the context of 5 and 10 pounds again being a small craft producer you know we don't produce 50 pounds of a single lot you know we've heard Micah talk about changing business models to accommodate testing rules and I don't think that that is a a fair application of the rules I think that we need to re you know you know maybe refocus and drive some changes that I think could be accomplished in the next you know 30 days with an extension those simply are you know uncouple the 502 testing panel with pesticides they can be conducted in in two separate tests to achieve the same results and then also allow the the the pesticide test to be handled in a manner similar to heavy metals I think Shawn mentioned it and a couple other people mentioned it as well and that includes third-party sampling so using an approach like this I do think would help small farmers from realizing some devastating effects and you know gutting the the backbone of this industry which was developed to be you know craft and small production I'll yield the rest of my time I will just like to say I appreciated your article yesterday sir **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Economic impact to labs, uncouple the 502 testing panel with pesticides
62	*Oral Testimony*	Bernard Kessler	2/02/2022	good morning I'm going to read this because I've got a few things I want to cover so my name is Bernard Kessler and my son and I are the owners and the only parties of interest at orange state cannabis and elk just north of Spokane and we are a producer processor the rules LCB are proposing regarding QA QC may not only not safeguard products it will financially impact in an inequitable manner most of the producer processors in the state very possibly put me and my four employees out of work if I sound a little bit passionate that's why starting with a process to safeguard products how can the LCB ever imagine that a producer who's willing to cheat on his pesticide use reporting either not consult the pit coal list or even worse purposely use a banned pesticide and then wouldn't cheat on his sample collection the grower may simply not collect the samples in the manner	Pesticide testing, testing costs, lot sizes

				required he may have untreated plants to test from or may just go purchase flower from a retailer that has successfully passed testing to think a pesticide cheater wouldn't do that borders on negligence the proposed sampling process sounds a whole lot to me like folks not in the industry developing something that on its surface is a simple solution but does not lead to increasing safeguards which we are all in favor of as far as the cost of testing as proposed most farms in state are small businesses and many of us carry many strains in smaller quantities again if the LCB had a better understanding the industry it would realize that almost no retailers would buy only one or two strains from a producer as strained trends shift quickly at the retail shops we have to keep a large variety of strains large lot testing only makes the problem worse is testing labs have to charge much higher prices per test to cover their fixed costs over fewer tests regardless if it's a five pound or fifty pound lot size that that's immaterial to this calculation again the few large producers with multiple large lots would fare the best and the smaller producers never mind the smaller tier of craft producers will suffer disproportionately and speaking of suffering disproportionately the LCB has a social equity task force that lists one of its responsibilities as advising the quote advising the governor and lieutenant governor on policies that will increase social equity in the cannabis industry quote is this position just lip service is this just an effort to appear socially responsible what does the LCB think the person looks like who is suffering the most from social inequity the large business owner grower with infinitely deep pockets and multiple investors or is it the small-time farmers counting every dime to make sure he can make payroll without filing yet another 75 cannabis additional funding application to be true to its stated social equity responsibility statement the LCB should consider this as an opportunity to reduce small operators costs not increase them I'll not be critical without offering alternatives the Washington sun craft growth association has close connections with growers and primarily to those that are not the few big box growers that this proposal seems to favor the process proposed by the WSCA addresses the financial impact inequity of the LCB proposal and solves the issue of potential sample adulteration I'm sure you have their contact info and if not I'd be happy to provide it to you thank you **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
63	*Oral Testimony*	Caitlein Ryan	2/02/2022	thank the board for hearing testimony today my name is Caitlein Ryan interim executive director for the cannabis alliance we're the largest member-driven industry organization dedicated to the advancement of a vital ethical and sustainable cannabis industry I want to say thank you to the board and staff we would like to acknowledge and express gratitude also for the dedication of industry stakeholders who have devoted significant effort in participating in this lengthy process the complexities in history of quality assurance testing is robust and we appreciate the multiple challenges in brokering agreement on a comprehensive rule set and we know we will not see alliance represents the spectrum of feedback you will hear many of our farmer members are signed on to the letter presented by the Washington sun and craft growers association illustrating the depth of challenge and finalizing a fair implementation of a testing program too long delayed additionally our patient and medical members continue to abandon the regulated market for more reliable product grown by their known legacy market sources due to low confidence in the safety of i-502 cannabis many patients conduct their own product testing with stakeholder labs to ensure their medicine is safe because there is no regulatory framework to provide guidance we acknowledge that there are significant areas for improvement in this proposed rule set and to that end we would like to make a conceptual proposal upon completion of this rule set we would ask LCB to take the lead on establishing a task force to proactively evaluate the impact of these rules during the first year of implementation well we know there is a structure in place for requesting rule changes what we are seeking for is an acknowledgement will need to be adjustments as the impact of the significant and important shift is implemented a stakeholder task force would provide for a formal forum for problem solving in the areas of concern such as third-party testing and lot size and it would also be a powerful advisory tool for stakeholder input and agency transparency should the interagency collaborative team be established later this year with legislation currently in session despite clear areas of needed improvement the imperative for these rules to be in place still remains we must come into alignment with all other adult use states and live up to our medical legacy by implementing pesticide testing in Washington state and we urge you to pass these rules today thank you **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers.	Establish task force, support for pesticide testing

				Was the comment reflected in the adopted rule? This comment was not reflected in the final rule.	
64	*Oral Testimony*	John Kingsbury	2/02/2022	My name is John Kingsbury I'm a medical cannabis patient I've listened to a lot of the concerns which I appreciate the business concerns but I'd like to speak to the other end of these rules as a consumer before I list my concerns about this proposal I need to say one thing a lot of good work has gone into this this is not going to simple or short task and I appreciate staff for all of this work even where I disagree with some of it the seriousness thoroughness and thoughtfulness of it is clearly visible so thank you to staff for that my highest hope for the results of this project has been that it would get us to a place where the quality assurance standards for recreational product would meet the standards for medical product unfortunately these rules do not get us there so now I may need to ask for more rulemaking from this agency and from DOHabout for medical products which is down the road so that'd be frustrating listening to Caitlein's idea though that may be an approach to address that these are not the rules that I would have written although I never expected that to happen so as it stands now these rules would not personally bring me into the regulated market but there is a lot of good in here in terms of quality assurance for recreational products I think the action limits are fine I'm okay with at will heavy metal testing for now unless problems reveal themselves down the road and the number of samples per weight is a creative approach and it would give me confidence as a consumer I think for recreational product in the not okay column again self-sampling is an obvious law my preference would be to go to a publicly funded sampling system as a consumer I would gladly pay extra for testing in order to get out of the illicit market but I also recognize that would require legislative action and I don't think that we should wait to implement some rules I've expressed concerns about total molds I believe the extraordinarily high levels of total molds is disturbing and making patients consumers sick and i wouldn't recommend any vulnerable patients touch products until it is tested for total molds testing end product the way I read the proposal on page 12 4c it says the only testing for final product of concentrates will be for cannabinoid levels if I'm reading that right I'm guessing the assumption here is that since intermediate product will be tested then end product pesticide testing will be covered by intermediate testing i think it would be terribly naive to assume that what the intermediate product is will necessarily be known and I strongly advocate testing for pesticides at the end product of concentrate so there's not another problem down the road the presence of that vataractan and other neem oil derivatives is understandably a deal breaker for many patients my preference is that azadorctin and other neem derivatives be prohibited from use on cannabis but I that may not be realistic and I would simply settle for labeling if I can know there is cow hormone in my milk I'd be able to look at the cannabis label and identify whether there are deficits and anticipates in them product trends should be fundamental having said that we are seven or eight years down the road into 502. and I think it is important that we get rules into place I don't think we should let the perfect be the enemy of the good and I strongly recommend that the board adopt these rules and move forward from here and I think that covers it for me thank you **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Self sampling, testing for mold, pesticide testing, neem and derivate pesticides
65	*Oral Testimony*	Jason Poll	2/02/2022	well Jason Paul tier three grower my farm is in Grant County by the gorge amphitheater and Washington sun and craft association member board member so I I'll leave you know echo whatever one's already said and just point out again you know we're trying to employ people keep ourselves alive this is very difficult so you know as a small sun growing out in the sun and indoor craft grower you know it's just a huge burden and I've seen a lot of change in the LCB and how you guys are handling things so I'm pretty confident that you guys are going to take into consideration our issues and you know I will end it at that thank you for the time **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Support for previous testimony

66	*Oral Testimony*	Vicki Christophersen	2/02/2022	Thank you my name is Vicki Christophersen I'm here today as the executive director for the Washington Cannabusiness Association testifying on behalf of our 85 licensed cannabis businesses members direct our policy priorities and have been committed since day one to safe quality controlled and fully regulated cannabis system in Washington I'm here today to encourage you to adopt quality quality control regulations this conversation amazingly started four years ago and after four years it's safe to say that the concerns have been heard evaluated and reflect input from all stakeholders there has been an ever-changing target for testing and safety when testing and safety should be one of the most bedrock values of our system in particular as the industry evolves adopting these rules under underlines what should be a fundamental tenet that cannabis products from Washington must be safe quality controlled and fully regulated when we say we care about what's going into products and thus going into consumers bodies we have the ability to prove we mean what we say and require testing when we say we're worried about the development of products and processes we don't understand we have the ability to address this concern by requiring testing when we agree that the illicit market continues to thrive and that products claiming to be cannabis are appearing outside the regulated market we have the ability to guarantee a safe regulated alternative with testing we can erase the mystery and fear or we can identify a problem through testing and address it to protect consumer safety after four years these rules now say heavy metal testing is optional in other words the longer we go on the more we drift away from the consumer which is who should be centered in this conversation while Washington was the first to approve adult use cannabis at this point we are the last to ensure testing of cannabis products to ensure their safety we urge you to move forward with adopting these rules appreciate the process that is taken to get here is long past time to move forward thank you **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Support for proposed rules.
67	*Oral Testimony*	Bonnie Jo Peterson	2/02/2022	hello thank you for the opportunity to testify today and I am Bonnie Jo Petersen the executive director and founder of the industrial hemp association of Washington and I am like most definitely want to see pesticide and heavy metal testing and it was mentioned and you know that end concentrate end of things is really a concern for the hemp industry if CBD and other cannabinoids are allowed it from the hemp industry into the regulated market to be added to products since that's the only thing that is allowed that those products are being tested with with heavy metals and pesticides and as mentioned you know the heavy metals can be dealt with and you know at this juncture but I do have you know the feeling that there should be some some cost reduction some incentives for the small growers whether that's some type of tax incentive or specific fees I'm also in support of having the WSDA or you know a specific agency that comes out and and takes those samples or whether it's at a you know a point of delivery but we do need to make sure that things are tested by labs that actually have the capability as well as having that you know fair and equitable end of things from farm level to to end users so again I commend like a lot of other people the LCB and you know it has taken a long time but we're you know it a good place where we can can make this works with more conversations and the solutions I really believe are you know really going to help the the market evolve with having the end consumer know what they're getting and thank you for for your time and I do want to do it the shout out to to Kathy thank you you're wonderful and keep keep up the good work okay thanks bye **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Sample collection, cost of testing, CBD from hemp
68	*Oral Testimony*	Jim Mccrae	2/02/2022	good morning oh wonderful oh that worked finally okay very good thank you for the opportunity to speak I also want to commend Kathy and her group on developing these rules the process this is specifically about the process you know it's hard to believe that was almost three years ago that we had our first listen and learn session on this and it was indeed I think the first listen and learn session that we had that the agency had had it was a new method of increasing engagement and the breadth of stakeholder input and it was commendable this process has gone on quite a bit longer than I think anybody expected I am just by summary not in support of the rules as they are currently written there are probably three or four primary reasons for that one is and I've said this again and again in in previous commentary so I'm not I don't have written comments today but I've said most of this stuff before I do not believe that it is appropriate to change the naming of these rules from quality assurance to quality control I've made that comment before but if you even look at the purpose of the rules as written in the CR 102 you know you make a couple of references to	Changing "quality assurance" to "quality control", pesticide and heavy metal testing, lot size

				the overarching goal of the WSLCB being to protect public health and safety and to emphasis added assure that all products sold within the i-502 market are safe for all consumers you get a little bit of semantic stuff going on in the explanation trying to justify this move away from assurance to control but in reality I see this as a move towards shifting the bar closer to what the agency has actually been able to achieve for the past seven years rather than what should be certainly assurance is better than control from a consumer perspective second concern I have is the focus on pesticides and heavy metals that's wonderful that's obviously being a gross thing missing from this state's product safety suite relative to the rest of the country it's becoming more and more apparent as the rest of the country comes on board with legalized cannabis to see pesticides now finally years into this process being mandated that's great but then now to see heavy metals go into a status they already had which is the ability to be randomly tested or part of an investigation the agency has always had that ability it's not a big ad here it's you're basically just doing nothing new with pesticide with any metals that I see the failure to address the repeated concerns about how this state chose and I believe it was 2018 to remove molds and mildews from testing which at the time were the probably the biggest single reason for flower particularly failing tests just removed it that's not a good thing the agency's been told that dozens and dozens of times I don't see those being added back in these rules that is an inadequacy and then finally this lot size thing I don't know where 50 pounds came from and I'm not going to speculate other than to say that every discussion that I have been part of and I've been involved in most of them for the past five years on this process thank you Dustin is that the alternate was a 10 pound lot maybe a 15 maybe a 20. regardless the lot size increase was clearly an effort to mitigate any increased cost for this increased testing it's a cost that every other legalized producer in the country bears our producers should bear it I do not support these rules and I really don't hope hope that you do not approve them as they are we need to go forward but not with these rules thank you very much **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
69	*Oral Testimony*	Tania Sasaki	2/02/2022	Good morning all right good morning first of all I want to say thank you for the opportunity to comment about these rules I am the chief science officer at confidence analytics which is a cannabis testing lab in Redmond Washington and we've been testing cannabis products for almost eight years and are one of the five labs that are currently accredited for pesticides and as we all know this has been a long topic of debate and the legislators approved formation and funding of the cannabis science task force about three years ago and the goal was to improve testing standards and quality and make it more consistent across all the labs in the state and I've been on five different working groups and working groups for that to help outline the standards for the testing methods not only to ensure testing quality but also standardized testing I'm here because I would like to voice my support for passing these rules as is the original date for pesticide testing was supposed to be May 2020. we all know the coronavirus pandemic among other things had different plans for that and so we've been deliberating this topic for as mentioned about five years now to get to this current state of the cr-102 as demonstrated by our early adoption as we've been testing pesticides for about six years our early adoption shows that we believe in the importance of pesticide testing to ensure clean product for the patients and consumers I've heard a lot of discussions and concerns about smaller craft producer processors about testing costs probably the majority of our clientele are these smaller producer processors so when we look at the increase to cost it's not going to go up five fold tenfold because of the increased lot sizes because most of our clients are the small ones that are that are having these smaller lattices will never reach that 30 40 50 pound lot size so for those reasons I think this needs to pass as is as long overdue to ensure the public health and safety of the patients and consumers and then finally I would also like to take this opportunity to remind the board that the taskers left two significant we call them parking lot items and they've been talked about here and that's a third-party sampling and I think a lot of people have mentioned that so I don't think I need to comment on that anymore but then also the ability for labs to obtain clean material from their clients in a bulk manner because for testing we do need clean matrix to match our quality controls and calibrations so that we'll get more accurate results and currently there's not a good cost effective way to do that and I know that's beyond the scope of this year I wanted to but I just wanted to put that out there in closing I just like to thank the board for the opportunity to resent my opinions and for your time and consideration can I ask you one quick question about lot size costs which you just mentioned but I'm trying to and it's one thing we've heard a lot about and I've taken some notes on that so it seems to me the concern is that if we go to this 50 pound that labs would just have a 50 pound kind of charge for that or are you saying that that's not the case that if I came to you with 15 pounds I'd be charged a 15 pound rate it's is it going to be one size fits all or it's not the cost is not going to scale the blot size you know because the cost to test a sample is the cost to test a sample whether it's 10 pounds or 50 pounds your costs are going to be generally the same you're saying very interesting okay thank you thanks for all the time you've put into this I do appreciate it	Support for proposed rules, third party sampling

				WSLCB response: The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
70	*Oral Testimony*	Dave Varshock	2/02/2022	Good morning board and staff my name is Dave Varshock I'm the general manager for full throttle farm in the Okanagan as well as a complex of farms comprising multiple licenses and multiple tiers the con this complex has been a contributing part of the i-502 since 2016. we proactively test our crops at the harvest level for pesticide pesticides our grounds are tested for heavy metals we're an organic sustainable farming practices farm we improve our soils and we absolutely pride ourselves and if we won't smoke it we won't sell it first before I go any further I'd like to kind of offer an apology to chair postman for some comments I've made in the past and assumptions I've made especially based and then light on some of the media that's been present over the last couple of days and I commend you for shining some light on some otherwise dark nooks and crannies of of what's going on here the CR 102 I'm here today to voice my opposition for it as written one of the problems I think is if I'm correct this CR 102 has been out since November or so and we've had the holidays in there and while this has been a long ongoing subject the the actual written language hasn't been around for very long especially in consideration to covet the holidays and so forth and whatnot so save a lot of time here I have provided my written testimony but I'd like to support a lot of what people have said along the way a couple of exceptions bonnie joe with the industrial hemp association I'm not really in support of hemp being a part of of our regulated market and their products there's a lot of untested substances in those things as a result of those conversions I think need a deeper dive into so I'm not support of that at all I I've heard a couple of recent ones about we've been at this a long time and we just need to pass it I couldn't disagree more if there's questions and stuff that's on undiscovered or we don't know then we need to take the time to figure it out before we pass something like this because it's going to affect upwards of 70 of the people that are involved in this industry and those are people there's people attached to those businesses it's not inanimate objects those are people's livelihoods and lives so I want to voice my support for the the Washington sun and craft growers they put in a lot of legwork and a lot of time more time than I have to develop this they've they've given you guys some great ideas how we could move forward right now and make some some good changes and keep this going I believe the small business impact economic impact study while awesome and a great thing to do I do think it fell short of diving deep enough into the environmental and or the environmental the economic impacts of this CR I think there's some costs that are going to go way up and put a lot of folks out of business and that scares the heck out of me third-party testing the ability for people to choose their own test samples is ludicrous the bad actors are going to exploit this they're going to use this and we're going to end up with a a lack of confidence in the products that are on the shelves in the marketplace last thing I want to see I've provided some ideas in my written testimony thank you very much for your time and keep up the good work Kathy thank you **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Concerns about increased costs
71	*Oral Testimony*	Jeff Newton	2/02/2022	sorry I haven't used this app before so I'm just figured out it was muted but well I think everything that I would have to say has been stated today but some I'm against and some I'm for I do think that pesticide testing is very important I do think that the lot size of 50 pounds is although it was probably well intentioned to save money I'm not sure how that's going to play out in the end because of the economics for labs and I heard what Tania from confidential said or confidence analytics said so that would be interesting to see I think that maybe a 30-day reprieve to look at it closer to the details for the economics as well as the process of collecting the samples would be a good idea one thing that I heard Tania say that I completely agree with if I understand what she was saying correctly is that I think it's very important for labs to have access to clean product that's coming in you know when it goes through one lab and is passed on to another I don't know that that's clean product and I don't know that there's any way to track and make sure that that product actually even came from the farm that that it said it was from if the farms were able to submit samples directly whether it's by third party choosing that sample or by that farm choosing it I think that's important because once you send it off to a processor for instance or anybody you don't know if the sample that you that they have sent in for the pesticide testing is really yours or not and in addition you don't know if the lab is receiving product that's clean or if their cleaning processes are are proper so I have no problem	Lot size, third party sampling

				with pesticide testing but you know I think there are a few more details to work out so I would I would like to see there be another 30 days that we could talk about it unfortunately I just found out about the issue because I'm not that informed I guess on this topic about four days ago or else I might okay thank you **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We have analyzed the suggestion of LCB staff conducting sampling, and found that sample collection by LCB staff presents operational and infrastructure challenges, including costs, insurance, additional vehicles, and would require legislative action. There may be some adjustments that will occur as the industry and labs adapt to the testing requirements, but these changes are necessary to protect the health and safety of all consumers. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	
72	*Email and attached Letter*	John Kingsbury	2/15/2022	I would like to submit the following attached comments to the QA rulemaking file. John Kingsbury February 15, 2022 WSR 22-01-055 QA Rulemaking comment: I would like to add additional comments to QA rulemaking. The additional requirements should be added. The following compounds should be considered to be adulterants and should be disallowed as additives, or as whole components, of 502 [word description?] products. 1. Cannabinoids that are solely chemically created substances that do not originate from cannabis plants, including hemp, but are structurally the same or substantially similar to the molecular structure of any substance derived from cannabis plants, including hemp, that may be cannabinoid receptor agonists and include, but are not limited to, any material, compound, mixture, or preparation that are not listed as a controlled substances in Schedules I through V of the Washington state controlled substances act. These prohibited cannabinoids should not include: (1 Naturally occurring chemical substances that are separated from cannabis plants, including hemp, by a chemical or mechanical extraction process; (2) Cannabinoids that are produced by decarboxylation from naturally occurring cannabinoid acids without the use of a chemical catalyst;or (3)Any other chemical substances resembling in any manner compounds found in the plant Cannabis that are identified by the board in consultation with the Department of Health, by rule. 2. Any cannabinoids that are altered by a chemical reaction that changes the molecular structure of any natural cannabinoid derived from cannabis plants, including hemp, to another cannabinoid found naturally in cannabis plants, including hemp.. **WSLCB response:** The WSLCB appreciates this comment, and the demonstration of meaningful, collaborative participation in the rulemaking process. The WSLCB looks forward to your continued partnership on future policy and rule development projects. We appreciate your suggestions regarding cannabinoids that are solely chemically created substances that do not originate from cannabis plants. **Was the comment reflected in the adopted rule?** This comment was not reflected in the final rule.	Cannabinoids that should be prohibited by rule