



MEMORANDUM

TO: Board Chair and Members of the Marijuana Control Board DATE: June 13, 2018

FROM: Jed Smith, Local Govt Specialist, and Sarah Oates, Program Coordinator RE: Testing Working Group Summary – June

Current Proposals

The testing working group has met telephonically nine times since January and has identified 28 specific questions generally grouped into four categories. Additionally, the State of Alaska's Environmental Health Laboratory conducted a desk audit on two licensed testing facilities (CannTest and SteepHill) and raised several questions about standard operating procedures, including sample preparation and equipment calibration. This report was finalized in late May, and the work group intends to address testing methodology in the coming months, once members have had the opportunity to review the report. The proposed regulation changes represent the discussions and the work of the group thus far.

- There is consensus among the working group that harvested marijuana should be graded and separated into four general categories prior to being tested: bud/flower, primary trim, secondary trim and kief. Kief may be combined across multiple harvests. Further, drawing "representative" rather than "random" samples from the categories will promote more accurate potency testing.
- There is also consensus on the reporting standard for potency, and that is reflected in the formula used to calculate total THC and total CBD.
- Sample collecting protocols, including required sample sizes, and certain laboratory operating and reporting procedures should come in the form of a guidance document from the Board, and not necessarily prescribed in regulation.
- There was not clear consensus regarding the amount of marijuana from a harvest that should be submitted by a cultivator to a testing facility. Colorado generally requires four grams per pound of harvested marijuana. Oregon requires 0.5 percent of the total harvest be submitted. The two proposals from the group are:
 - a flat requirement of four grams in half-gram increments (for a total of eight samples); or
 - a graduated number of ~1g samples – based upon total harvest batch size – with a minimum requirement of four, ~1g samples, and requiring ~0.35% of each harvest batch to be submitted for testing (see Table A on page 2).



Batch Size (pounds)	Number of Increments (~ 1g each)	Sample Size (% of Batch)
1	4	---
2	4	---
3	5	0.35
4	6	0.35
5	8	0.35
6	10	0.35
7	11	0.35
8	13	0.35
9	14	0.35
10	16	0.35

Table A. Sample Size ~ 0.35% of Batch Size (4 gram minimum)

Next Steps

The group has not yet addressed edible potency testing or process validation testing, nor has the group addressed testing for marijuana concentrates. One topic that has generally been discussed is whether to allow some marijuana flower or trim to skip testing if it is being transferred for concentrate manufacturing. All marijuana and marijuana products would be subject to testing at some point prior to being sold to consumers.

The group is preparing to discuss setting acceptable or action levels for pesticides, microbials, aflatoxins, metals and residual solvents, but also recognizes significant challenges lie ahead due to the lack of research and federal guidance on the matter.

(Words in **boldface and underlined** indicate language being added; words [CAPITALIZED AND BRACKETED] indicate language being deleted.)

3 AAC 306.345 (b)(2) is repealed and readopted to read:

(2) states the estimated amount of total THC in the labeled product; and

(Eff. 2/21/2016, Register 217; am __/__/__, Register__)

Authority:	AS 17.38.010	AS 17.38.150	AS 17.38.200
	AS 17.38.070	AS 17.38.190	AS 17.38.900
	AS 17.38.121		

3 AAC 306.435 is amended to read:

3 AAC 306.435. Marijuana inventory tracking system (a) A marijuana cultivation facility shall use a marijuana inventory tracking system in compliance with 3 AAC 306.730 to ensure all marijuana propagated, grown, or cultivated on the marijuana cultivation facility's premises is identified and tracked from the time the marijuana is propagated through transfer to another licensed marijuana establishment or destruction. The marijuana cultivation facility shall assign a tracking number to each plant over eight inches tall. When harvested, **each** [BUD AND FLOWERS, CLONES OR CUTTINGS, OR LEAVES AND TRIM MAY BE COMBINED IN HARVEST BATCHES OF DISTINCT STRAINS, NOT EXCEEDING FIVE POUNDS. EACH] harvest batch must be given an inventory tracking number. Clones or cuttings **shall be identified by an inventory tracking number; each inventory tracking number shall be assigned to 50 or fewer plants.** [MUST BE LIMITED TO 50 OR FEWER PLANTS AND IDENTIFIED BY A

BATCH TRACKING NUMBER].

(b) A marijuana cultivation facility shall record each sale and transport of **any plants and** each batch in its marijuana inventory tracking system, and shall generate a valid transport manifest to accompany **any plants and** each transported batch. (Eff. 2/21/2016, Register 217; am __/__/__, Register____).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200
AS 17.38.070 AS 17.38.190 AS 17.38.900
AS 17.38.121

3 AAC 306.445 is repealed and readopted to read:

3 AAC 306.445. Standards for cultivation and preparation. (a) A marijuana cultivation facility shall use registered scales in compliance with AS 45.75.080 and 3 AAC 306.745.

(b) Harvested marijuana will be segregated into batches using the following grades:

(1) from marijuana plants that are uniform in strain, cultivated in one place and under the same conditions, using the same medium and agricultural chemicals including pesticides and fungicides, and harvested in a time period not to exceed 72 consecutive hours

- (A) bud and flower;
- (B) primary trim; and
- (C) secondary trim; and

(2) kief, which may be combined from multiple strains and harvests. (Eff. 2/21/2016, Register 217; am __/__/__, Register____).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200

AS 17.38.070

AS 17.38.190

AS 17.38.900

AS 17.38.121

3 AAC 306.455 is amended to read:

3 AAC 306.455. Required laboratory testing. (a) A marijuana cultivation facility shall provide **samples** [A SAMPLE] of each harvest batch of marijuana produced at the facility to a marijuana testing facility and may not sell or transport any marijuana until all laboratory testing required under 3 AAC 306.645 has been completed.

(b) To comply with (a) of this section, a marijuana cultivation facility shall

(1) collect a **representative** [RANDOM], homogenous sample for testing [BY SEGREGATING HARVESTED MARIJUANA INTO BATCHES OF INDIVIDUAL STRAINS OF BUD AND FLOWER, THEN SELECTING A RANDOM SAMPLE] from each **harvest** batch **that has been uniformly dried and cured**, in an amount **and using methods in compliance with guidelines prescribed by the board** [REQUIRED BY THE MARIJUANA TESTING FACILITY];

(2) designate an individual responsible for collecting each sample; that individual shall

(A) prepare a signed statement showing that each sample **is representative of the harvest** [HAS BEEN RANDOMLY SELECTED FOR TESTING];

(B) provide the signed statement to the marijuana testing facility; and

(C) maintain a copy as a business record under 3 AAC 306.755; and

(3) transport the **samples** [SAMPLE] to the marijuana testing facility's licensed premises in compliance with 3 AAC 306.750.

(c) A marijuana cultivation facility shall segregate the entire batch from which the testing **samples were** [SAMPLE WAS] selected until the marijuana testing facility reports the results from its tests. During this period of segregation, the marijuana cultivation facility that provided the **samples** [SAMPLE] shall maintain the batch in a secure, cool, and dry location to prevent the marijuana from becoming contaminated or losing its efficacy. The marijuana cultivation facility that provided the **samples** [SAMPLE] may not sell or transport any marijuana from the segregated batch until the marijuana testing facility has completed its testing and provided those results, in writing, to the marijuana cultivation facility that provided the **samples** [SAMPLE]. The marijuana cultivation facility shall maintain the testing results as part of its business books and records. (Eff. 2/21/2016, Register 217; am __/__/__, Register__).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200
AS 17.38.070 AS 17.38.190 AS 17.38.900
AS 17.38.121

3 AAC 306.475(d)(2) is amended to read:

(2) the **inventory tracking** [HARVEST BATCH] number assigned to the marijuana in the package;

(Eff. 2/21/2016, Register 217; am __/__/__, Register__).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200
AS 17.38.070 AS 17.38.190 AS 17.38.900
AS 17.38.121

3 AAC 306.645(a) is amended to read:

(a) A marijuana testing facility shall use the general body of required laboratory tests as set out in this section for marijuana plant material, an extract or concentrate of marijuana, and [AN EDIBLE] a marijuana product. Required tests may include potency analysis, moisture content, foreign matter inspection, microbial screening, pesticide, other chemical residue, and metals screening, and residual solvents levels. A marijuana testing facility shall establish a schedule of fees [AND SAMPLE SIZE] required for each test it offers, **and shall perform tests using methods in compliance with guidelines prescribed by the board.**

(Eff. 2/21/2016, Register 217; am __/__/__, Register__).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200
AS 17.38.070 AS 17.38.190 AS 17.38.900
AS 17.38.121

3 AAC 306.645(b)(1)(B)(i) is repealed and readopted to read:

(i) for a potency test on marijuana and marijuana concentrate, the marijuana testing facility shall list for each required cannabinoid a single percentage concentration, based on dry weight, that represents an average of all samples within the test batch; additionally, total THC and total CBD shall be reported. (Eff. 2/21/2016, Register 217; am __/__/__, Register__).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200
AS 17.38.070 AS 17.38.190 AS 17.38.900
AS 17.38.121

3 AAC 306.645(b)(2) is amended to read:

(2) microbial testing for the listed substances on the listed **marijuana and**

marijuana products is required as follows:

Substance	Acceptable Limits Per Gram	Product to be Tested
--Shiga-toxin producing Escherichia coli (STEC)-bacteria	Less than 1 colony forming unit (CFU/g)	<u>Marijuana</u> [FLOWER]; retail marijuana products; water-and food-based concentrates
<i>Salmonella</i> species-bacteria	Less than 1 colony forming unit (CFU/g)	
<i>Aspergillus fumigatus</i> , <i>Aspergillus flavus</i> , <i>Aspergillus niger</i> -fungus	Less than 1 colony forming unit (CFU/g)	

(Eff. 2/21/2016, Register 217; am __/__/__, Register__).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200
AS 17.38.070 AS 17.38.190 AS 17.38.900
AS 17.38.121

3 AAC 306.670(b) is amended to read:

(b) A marijuana testing facility shall establish procedures to ensure that reported results are accurate, precise, and scientifically valid. To ensure reported results are valid, a marijuana

testing facility shall **report results in compliance with guidelines prescribed by the board**
and shall include in a final report

- (1) the name and location of the marijuana testing facility;
- (2) the unique sample identifier assigned by the marijuana testing facility;
- (3) the marijuana establishment or other person that submitted the testing sample;

(4) the sample identifier provided by the marijuana establishment or other person that submitted the testing sample;

- (5) the date the marijuana testing facility received the sample;
- (6) the chain of custody identifier;
- (7) the date of the report;
- (8) the type of marijuana or marijuana product tested;
- (9) the test results;
- (10) the units of measure; and

(11) any other information or qualifiers needed for interpretation of the test method and the results being reported, including any identified and documented discrepancy.

(Eff. 2/21/2016, Register 217; am __/__/__, Register__).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200
AS 17.38.070 AS 17.38.190 AS 17.38.900
AS 17.38.121

3 AAC 306.990 (b) (3) is amended to read:

(3) "batch" or "harvest batch" means a specifically identified quantity of **bud and flower,** plant trim, leaf, and other usable product from marijuana plants, **that has been segregated into a specific grade as required by 3 AAC 306.445(b), and does not exceed 10 pounds** [THAT ARE UNIFORM IN STRAIN, CULTIVATED IN ONE PLACE AND UNDER THE SAME CONDITIONS, USING THE SAME MEDIUM AND AGRICULTURAL CHEMICALS INCLUDING PESTICIDES AND FUNGICIDES, AND HARVESTED AT THE SAME TIME]; (Eff. 2/21/2016, Register 217; am __/__/__, Register__).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200
AS 17.38.070 AS 17.38.190 AS 17.38.900
AS 17.38.121

3 AAC 306.990 (b) is amended by adding new paragraphs to read:

(40) "primary trim" means the hairy, sticky, or crystal-covered parts of mature female marijuana plants generally harvested for a potency content that is considered inferior to bud and flower, including immature tops and sugar leaves.

(41) "secondary trim" means usable marijuana that is harvested with an expected lower potency content than that of primary trim, including fan leaves, and has been significantly macerated.

(42) "total THC" means the sum of THC and (0.877) * (THCA)

(43) "total CBD" means the sum of CBD and (0.877) * (CBDA)

(Eff. 2/21/2016, Register 217; am __/__/__, Register__).

Authority: AS 17.38.010 AS 17.38.150 AS 17.38.200

AS 17.38.070

AS 17.38.190

AS 17.38.900

AS 17.38.121