



DIVISION OF PUBLIC and BEHAVIORAL HEALTH Policy

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1.0 POLICY

All Independent Testing Laboratories will be testing residual solvents levels pursuant to NAC 453A.654 and NAC 453A.592. Independent Laboratory Advisory Committee (ILAC) will determine the acceptable levels of residual solvents or gases for testing of solvent-based extracts per NAC 453A.592.

NAC 453A.654 Required quality assurance tests. ([NRS 453A.370](#))

1. Each independent testing laboratory must use the general body of required quality assurance tests for usable marijuana, marijuana-infused products, extracts of marijuana and edible marijuana products set forth in this section. Such tests may include moisture content, potency analysis, foreign matter inspection, microbial screening, pesticide and other chemical residue and metals screening and residual solvents levels. An independent testing laboratory may request additional sample material in excess of the amounts listed in the table set forth in this section for the purposes of completing required quality assurance tests. An independent testing laboratory may retrieve samples from the premises of another medical marijuana establishment and transport the samples directly to the laboratory.

2. The tests required pursuant to subsection 1 and the sample size of products required for the required testing of each type of marijuana or marijuana product by an independent testing laboratory are as follows:

Product	Tests Required	Sample Size Needed to Complete all Tests
Extract of marijuana (solvent-based) made using n-butane, isobutane, propane, heptane, or other solvents or gases approved by the Division of at least 99 percent purity	1. Potency analysis 2. Terpene analysis 3. Residual solvent test 4. Microbial screening (only if using marijuana that failed the initial test)	2 grams or less

NAC 453A.592 Authorized methods, equipment, solvents, gases and mediums.

7. The acceptable parts per million for 1 gram of finished extract of residual solvent or gas will be determined by the Independent Laboratory Advisory Committee established pursuant to [NAC 453A.666](#).

2.0 PURPOSE

The purpose of this policy is to establish the acceptable concentration limits for residual solvents to be used by all Independent Testing Laboratories (ITL) based on recommendation from the ILAC.



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3.0 SCOPE

This policy applies to Nevada Medical Marijuana Independent Testing Laboratories that have been awarded Provisional or Final Registration Certificates from DPBH.

4.0 PROCEDURE

4.1. All Independent Testing Laboratory shall analyze marijuana products and extracts for residual solvents that are approved to be used during production processes at the Medical Marijuana Establishments in accordance with NAC 453A.592. The approved solvents are: N-butane, isobutene, propane and heptane.

NAC 453A.592 Authorized methods, equipment, solvents, gases and mediums. ([NRS 453A.370](#))

1. A facility for the production of edible marijuana products or marijuana-infused products may only use the methods, equipment, solvents, gases and mediums set forth in this section when creating marijuana extracts.
2. A facility for the production of edible marijuana products or marijuana-infused products may use the hydrocarbons **N-butane, isobutane, propane, heptane** or other solvents or gases exhibiting low to minimal potential human health-related toxicity approved by the Division.

Substance	Acceptable Limits Per Gram of Product	Product to be Tested
<i>Approved solvents</i>		FOR ALL SOLVENT-BASED CONCENTRATES
Butanes	<800 Parts Per Million (PPM)	
Heptane	<500 Parts Per Million (PPM)	
Propane	<100 Parts Per Million (PPM)	

4.2. If, as part of contamination in the intended extraction solvent, any of Class 3 solvents listed in the American *Herbal Pharmacopoeia Cannabis Inflorescence Standards of Identity, Analysis, and Quality Control*, Table 12 are detected during testing process, the amount should not exceed 500 parts per million (PPM) per gram of product.

Any other detected solvents that belong to Class 2 solvents listed in the American *Herbal Pharmacopoeia Cannabis Inflorescence Standards of Identity, Analysis, and Quality Control*, Table 12 should not exceed _____ parts per million (PPM).

4.3. If concentration of any detected Class 2 and/or Class 3 contaminant exceeds acceptable limit, the production batch should be deemed failed and the results of the testing are to be reported to the Division.



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NAC 453A.658 Sample testing; disposal of samples; standards; laboratory test results; grounds for disciplinary action. (NRS 453A.370)

4.4 If any concentration of residual solvents associated with a potential health hazard are detected during testing process, the results of the testing are to be reported to the Division. Under no circumstances shall the facility which provided the sample sell the products before the time that the independent testing laboratory has completed its testing and analysis and provided those results, in writing, to the facility which provided the sample. Except as otherwise provided in NAC 453A.672, if a sample provided to an independent testing laboratory pursuant to this section does not pass the residual solvent levels test based on the standards of the Division, the facility which provided the sample shall dispose of the entire batch from which the sample was taken and document the disposal using its inventory control system. Medical marijuana staff will have to witness and verify proper disposal of the marijuana pursuant to NAC 453A.414.

5.0 REFERENCES:

American Herbal Pharmacopoeia. Cannabis Inflorescence: Standards of Identity, Analysis, and Quality Control, Revision 2014. Web Access 19 August 2015. <http://www.herbal-ahp.org/>

State of Colorado Revised Statutes

<https://www.colorado.gov/pacific/enforcement/laws-constitution-statutes-and-regulations-marijuana-enforcement>

State of Washington Administrative Code

<http://apps.leg.wa.gov/wac/default.aspx?cite=314-55&full=true#314-55-102>