



Virginia Department of Planning and Budget **Economic Impact Analysis**

6 VAC 40-50 Regulations for the Approval of Marijuana Field Tests for Detection of Marijuana Plant Material

Department of Forensic Science

Town Hall Action/Stage: 5757/9583

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The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia (Code) and Executive Order 19. The analysis presented below represents DPB's best estimate of these economic impacts.¹

Summary of the Proposed Amendments to Regulation

The Board of Forensic Science (Board) proposes to amend the regulation so that alternative field tests and mobile instruments to detect marijuana may be approved by the Board. Once alternative field tests are approved under the proposed regulation, law enforcement officials will be legally permitted to testify in court using the test results.

Background

Code of Virginia (Code) § 19.2-188.1(B) allows law enforcement officers to testify as to the results of any marijuana field test approved as accurate and reliable by the Department of Forensic Science (DFS) in any trial for a violation of Code § 4.1-1105, which prohibits simple possession of marijuana by a person under 21 years of age.² The field test would be performed at the time of the arrest to permit law enforcement officers to determine whether the plant material

¹ Code § 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the analysis should include but not be limited to: (1) the projected number of businesses or other entities to whom the proposed regulatory action would apply, (2) the identity of any localities and types of businesses or other entities particularly affected, (3) the projected number of persons and employment positions to be affected, (4) the projected costs to affected businesses or entities to implement or comply with the regulation, and (5) the impact on the use and value of private property.

² See Virginia Code § 19.2-188.1(B) (<https://law.lis.virginia.gov/vacode/title19.2/chapter12/section19.2-188.1/>) and Virginia Code § 4.1-1105.1 (<https://law.lis.virginia.gov/vacode/title4.1/chapter11/section4.1-1105.1/>)

in the individual's possession exceeds the statutory concentration of tetrahydrocannabinol (THC) and thus meets the statutory definition of marijuana, as defined in Virginia Code § 4.1-600. This allows for the expeditious handling of these types of violations by the court without the need to wait for the analysis of the plant material by DFS, unless the defendant requests a full chemical analysis.

The regulation currently allows for the approval of Duquenois-Levine field tests to detect *Cannabis sativa* plant material. However, Duquenois-Levine tests cannot independently distinguish between marijuana and industrial hemp, which are both varieties of the *Cannabis sativa* plant.³ Thus, although these tests were adequate when the regulation was first written, the legalization of industrial hemp at the federal level in 2018 and subsequent legislation in Virginia made Duquenois-Levine tests obsolete.⁴ DFS notified law enforcement agencies, prosecutors, defense attorneys, and judges about the legal changes and implications for approved field tests in May 2019. DFS also tested one field test (the 4-AP) that could distinguish marijuana from industrial hemp if used in conjunction with a Duquenois-Levine test.⁵ Currently, according to the agency, there are no individual tests, combination kits, or mobile instruments in wide distribution that can identify *Cannabis sativa* plant material and determine if it is marijuana or industrial hemp.

DFS also approves field tests for several different substances under Virginia Code § 19.2-188.1(A) for preliminary hearing purposes. Some marijuana field tests are approved under that section, but the plant material would be submitted to the laboratory for analysis for purposes of trial.⁶ DFS has indicated that any test approved under this regulation (with the proposed changes) must be able to identify cannabis and distinguish marijuana from hemp.

The most substantive proposed amendments are summarized below:

³ Agency Background Document (ABD), page 2.

⁴ See <https://www.congress.gov/115/plaws/publ334/PLAW-115publ334.pdf> for the federal legalization of industrial hemp. See 2019 Acts of Assembly chapters 653 and 654 for the legalization of industrial hemp and hemp products in Virginia: <https://lis.virginia.gov/cgi-bin/legp604.exe?ses=191&typ=bil&val=ch653> and <https://lis.virginia.gov/cgi-bin/legp604.exe?ses=191&typ=bil&val=ch654>

⁵ The ABD (p.3) states that the 4-AP test cannot currently be approved because it is not a Duquenois-Levine test and because, when used alone, it cannot presumptively identify *Cannabis sativa* plant material accurately and reliably, as required by statute. DFS has clarified that even under the proposed changes, the 4-AP would only be approved for use in conjunction with a Duquenois-Levine test.

⁶ The corresponding regulations are in 6VAC40-30 *Regulations for the Approval of Field Tests for Detection of Drugs* <https://law.lis.virginia.gov/admincode/title6/agency40/chapter30/>

- Definitions (Section 10). New definitions would be added for “cannabis plant material” and “industrial hemp,” and the definition of “marijuana” would be updated to reflect changes in federal and state law pertaining to cannabis, hemp, and marijuana. Definitions of “list of approved marijuana field tests” and “marijuana field test” would be revised to remove the words “Duquenois-Levine test.” The definition of “marijuana field test” would instead specify “chemical test, combination of chemical tests, or mobile instrument,” thereby expanding the scope of tests that could be approved. Lastly, the definition of “marijuana field test kit” would be eliminated because it would be made redundant by the changes to “marijuana field test.”
- Authority for Approval of Field Tests (Section 20). An amendment would be made to reflect the new Code provision for underage possession of marijuana as Virginia Code § 4.1-1105.1.
- Request for Evaluation (Section 30). Amendments would establish separate sets of instructions, criteria, and procedures for the approval of chemical tests and mobile instruments. (The requirements for mobile instruments closely parallel those for approval of presumptive mobile instruments set out in 6 VAC 40-30-30.⁷) Another requirement for both type of field tests that would be added is that they must be able to distinguish marijuana from industrial hemp.

For chemical tests, manufacturers would have to supply materials sufficient for at least 20 marijuana field tests (rather than the ten currently required) so that ten samples each of marijuana and industrial hemp can be evaluated. Other new requirements include submitting any foundational validation studies, exact specifications as to the chemical composition of all chemicals or reagents, their volume or weight, and the nature of their packaging. For mobile instruments, manufacturers would have to supply two non-sequentially manufactured instruments and supporting materials (including foundational validation studies and training materials) for each model for which the manufacturer requests evaluation. The instruments would be returned to the manufacturers upon completion of the evaluation.

- Maintenance of Approved Status (Section 50). Proposed amendments would include firmware and software modifications to the list of changes to a marijuana field test that could require reevaluation by DFS for continued approval under Virginia Code § 19.2-188.1.

⁷ See footnote 7.

- Fees (Section 80). The fee for chemical testing would be increased from \$50 to \$100. The proposed amendments would also establish a new fee of \$500 payable by manufacturers of mobile instruments to recover the costs involved in evaluating each model of the mobile instrument that DFS considers for approval. As with the doubling of the chemical samples in Section 30, the doubling of the chemical testing fee reflects the fact that DFS will have to separately test ten samples of marijuana and ten samples of industrial hemp, as opposed to just ten samples of *Cannabis sativa* plant material.

DFS reports that the new \$500 fee for evaluating mobile instruments was based on the \$2,500 fee in 6 VAC 40-30 (which became effective on October 1, 2020) and reflects the amount of time for an evaluator to review all of the materials, including instructions, training, and foundational validation studies for a mobile instrument. For that regulation, the mobile instruments would have to be tested on multiple street drugs to see if the instrument can effectively identify those drugs. With the marijuana instruments under this regulation, DFS reports that although the examiner would still need to become familiar with the instrument's instructions and use, the testing would only need to be done for marijuana and hemp samples. Thus, DFS scientists and the Board felt that \$500 was more appropriate for approval of those instruments for that limited testing. DFS further reported that these fees are not revenue generating for the agency, and only recoup the evaluation costs with staff time invested.

Estimated Benefits and Costs

The proposed amendments would allow DFS to evaluate and authorize field tests that detect marijuana at a sufficient level of accuracy and reliability for the results to be included in legal testimony in a trial. DFS reports that allowing law enforcement the ability to accurately detect marijuana in the field and testify to this result in a trial would support the goal of public safety. Persons accused of marijuana-related offenses who are awaiting trial would still be allowed to request laboratory testing, and law enforcement would still be legally required to inform the accused of their right to do so.

Businesses engaged in developing, producing, and supplying drug tests would be incentivized to develop accurate and reliable tests for marijuana, and would not be limited to Duquenois-Levine tests. Although they would have to pay chemical testing fees and/or mobile instrument testing fees, and supply twice the current quantity of chemical samples for testing,

they would stand to generate significant revenues if their products were approved by DFS because approved tests would likely be purchased by law enforcement agencies throughout the state.

DFS also reports that if law enforcement officers were able to testify that the suspected plant material was marijuana at trial for underage possession, this would allow cases to go to trial more expeditiously than if laboratory analysis were used, unless the accused moved for such analysis. This could potentially reduce the number of cases submitted to DFS' laboratory and the time taken for such cases to go to trial, which may lead to further cost reductions for local jails to the extent that accused individuals spend fewer days in custody awaiting trial. DFS has indicated that a reduction in the cases submitted for laboratory analysis would not disadvantage the agency.

Businesses and Other Entities Affected

As mentioned previously, private businesses that may be working to develop, manufacture, and supply field tests for marijuana would benefit from allowing a broader scope of field tests to be considered for DFS' approval. The number of businesses engaged in this area of research and development is currently unknown, but more businesses may enter the market since the scope of allowable tests would be expanded by the proposed changes. The proposed amendments would not impose any costs on these businesses unless they applied for approval. As mentioned previously, any fees and other costs associated with applying for approval would likely be fully recovered if the field test or mobile instrument was approved by DFS because law enforcement agencies throughout the state would likely purchase them. Other entities that seek to conduct marijuana tests on found samples of cannabis plant material may also purchase these tests if they are widely considered to be more accurate and reliable than the tests currently available on the market.

The Code of Virginia requires DPB to assess whether an adverse impact may result from the proposed regulation.⁸ An adverse impact is indicated if there is any increase in net cost or

⁸ Pursuant to Code § 2.2-4007.04(D): In the event this economic impact analysis reveals that the proposed regulation would have an adverse economic impact on businesses or would impose a significant adverse economic impact on a locality, business, or entity particularly affected, the Department of Planning and Budget shall advise the Joint Commission on Administrative Rules, the House Committee on Appropriations, and the Senate Committee on Finance. Statute does not define "adverse impact," state whether only Virginia entities should be considered, nor indicate whether an adverse impact results from regulatory requirements mandated by legislation.

reduction in net revenue for any entity, even if the benefits exceed the costs for all entities combined. Even though the proposed amendments increase fees and create a new fee, no business or other entity would be required to pay it unless they chose to apply for DFS' approval of a marijuana field test. As discussed above, the choice to do so would significantly benefit the applicant if their test was approved.

Small Businesses⁹ Affected:¹⁰

Types and Estimated Number of Small Businesses Affected

Some of the businesses developing these tests may be small businesses. However, the number of businesses, including the number of small businesses, is unknown.

Costs and Other Effects

The proposed amendments would not impose any costs on small businesses unless they sought DFS approval for a field test or mobile instrument.

Alternative Method that Minimizes Adverse Impact

There are no alternatives that would minimize adverse impact and meet the objectives of the regulation.

Localities¹¹ Affected¹²

The proposed amendments do not disproportionately affect particular localities and do not introduce costs for local governments. Consequently, an adverse economic impact¹³ is not indicated for any localities.

⁹ Pursuant to § 2.2-4007.04 of the Code of Virginia, small business is defined as “a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.”

¹⁰ If the proposed regulatory action may have an adverse effect on small businesses, Code § 2.2-4007.04 requires that such economic impact analyses include: (1) an identification and estimate of the number of small businesses subject to the proposed regulation, (2) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents, (3) a statement of the probable effect of the proposed regulation on affected small businesses, and (4) a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation. Additionally, pursuant to Code § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules shall be notified.

¹¹ “Locality” can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulatory change are most likely to occur.

¹² § 2.2-4007.04 defines “particularly affected” as bearing disproportionate material impact.

¹³ Adverse impact is indicated if there is any increase in net cost or reduction in net revenue for any entity, even if the benefits exceed the costs for all entities combined.

Projected Impact on Employment

The proposed amendments are unlikely to impact employment either by DFS, or by businesses that make field tests.

Effects on the Use and Value of Private Property

The proposed amendments could increase the value of businesses that develop marijuana field tests and mobile instruments by establishing a legal pathway for them to obtain DFS approval for use in trial testimony. In particular, if a business were to develop such a test and obtain DFS approval, their products would likely be purchased by law enforcement agencies throughout Virginia, which could yield large profits, depending on whether they faced any competition. The proposed amendments do not affect real estate development costs.