Governor

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DAVID B. RAUSCH Director

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The purpose of this letter is to notify you of updated testing procedures in TBI Crime Laboratory Forensic Chemistry Unit effective September 3, 2019. Cannabis sativa has been cultivated for both its psychoactive properties (marijuana) and for other properties (hemp). Both cultivars, marijuana and hemp, are the same plant - Cannabis sativa. Tennessee has legalized the cultivation of hemp and defined hemp as Cannabis sativa containing less than 0.3% THC. Marijuana, Cannabis sativa containing greater than 0.3% THC, is still illegal in Tennessee. Differentiating between hemp and marijuana has become a topic of great interest for crime labs on a national scale.

In addition to existing microscopic analysis and Duquenois-Levine color test, all tested plant material exhibits will receive an additional color test to indicate the ratio of cannabidiol (CBD) to tetrahydrocannabinol (THC). This test is commonly known as the "Swiss" or "4-AP" test. This test does not test the concentration of THC but signals the ratio of CBD to THC. Hemp contains higher levels of CBD and will indicate a pink color change, while marijuana contains higher levels of THC and will indicate a blue color change. This color test is commercially available and should be considered an excellent field test for plant material samples.

Exhibits of plant material analyzed with this new color test will be reported as either: Cannabis - Visual and chemical color testing presumptively indicate the exhibit is marijuana. Cannabis - Visual and chemical color testing presumptively indicate the exhibit is hemp.

Further testing to estimate or determine exact THC percentage of plant material is available; however, this additional testing is very resource intensive. As such, this testing will only be performed on felony amounts of plant material and at District Attorney's request if needed for trial. Misdemeanor plant material cases will receive no further testing. The above testing protocol applies only to plant material exhibits and does not apply to exhibits of edibles, vape cartridges, or other marijuana and/or hemp products.

All other Forensic Chemistry cases will continue to be tested to provide the maximum penalty for prosecution. No additional exhibits will be tested beyond this maximum penalty. Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,

Assistant Director

TBI Forensic Services Division

