# TEXAS DEPARTMENT OF PUBLIC SAFETY

5805 N LAMAR BLVD • BOX 4087 • AUSTIN, TEXAS 78773-0001
512-424-2000
www.dps.texas.gov



July 2, 2025

To: District/County Attorney's Office

Subject: Texas Forensic Science Commission Complaint Related to Analysis and Reporting of Vape Cartridge Cases

The Texas Department of Public Safety Crime Laboratory Division ("Laboratory") strives to make every effort to inform our customers of any forensic disclosure events for the purpose of ensuring the Laboratory's compliance with Texas Code of Criminal Procedure Article 39.14.

On January 3, 2025, the Laboratory became aware of a complaint filed with the Texas Forensic Science Commission ("TFSC") on December 21, 2024. The complaint was related to a case worked in our Tyler location in which a vape cartridge was tested and reported to contain delta-9-tetrahydrocannabinol over the 1% administrative threshold as well as delta-8-tetrahydrocannabinol.

The complaint discusses two issues. The complaint first alleges that delta-9-tetrahydrocannabinolic acid ("delta-9-THCA") is not controlled while delta-9-tetrahydrocannabinol ("delta-9-THC") is controlled. The complaint also contends that the Laboratory's testing method converted delta-9-THCA that was present in the vape cartridge into delta-9-THC. The complaint does not allege professional negligence or misconduct with respect to the testing that was performed.

As to the first issue, the TFSC stated delta-9-THCA's legality "falls within the sole province of a court with competent jurisdiction." The Laboratory has interpreted Texas Agriculture Code Section 122.153 to require that hemp sample testing should be performed utilizing a post-decarboxylation method that reflects the total available delta-9-THC derived from the combined delta-9-THC and delta-9-THCA content. This testing method requires that delta-9-THCA present in the plant sample be converted to delta-9-THC before or during analysis. Section 122.153 describes preharvest testing but does not speak to forensic laboratory testing of vape cartridges, oils, or other non-plant cannabinoid products. Texas Administrative Code, Department of Agriculture, Hemp Program, Methods for Testing (Section 24.26) also describes the use of a testing method in which the result reflects the total delta-9-THC content.

As to the second issue, the Laboratory reports total delta-9-THC. Total delta-9-THC is a combination of delta-9-THC and converted delta-9-THCA. Analysis of vape devices is conducted using a method that is known to cause partial conversion of delta-9-THCA, if present, to delta-9-THC and will contribute to the total delta-9-THC concentration. The process for this conversion is called decarboxylation. The Laboratory has demonstrated through a validation that the method can and does convert delta-9-THCA to delta-9-THC when heated, though the conversion rate varies and is not complete. Analysts are not able to determine the contribution of converted delta-9-THCA in relation

to the total delta-9-THC content. This method does not change any isomer of THC into another isomer. For example, delta-8-THC is not converted to delta-9-THC during analysis or vice versa.

The TFSC opened an investigation into this complaint. Based on recent dialogue with investigating TFSC officials, TFSC is expected to recommend the Laboratory clarify in its reporting statements when the testing method does not distinguish between delta-9-THCA and delta-9-THC. The TFSC will also likely recommend that laboratories provide a general customer notice outlining method limitations and offer to issue amended reports.

The Laboratory paused analysis on any unopened cases containing vape cartridges beginning March 13, 2025, pending TFSC's final recommendations. The TFSC report on this complaint is expected to be presented for approval at its July 2025 quarterly meeting.

On future issued reports, the Laboratory will be providing additional clarity, where applicable, that the method used converts tetrahydrocannabinolic acids (THCA), if present, to tetrahydrocannabinols (THC).

Future reports of oils and vape cartridges tested using our 1% administrative threshold method will include:

> *The total delta-9-tetrahydrocannabinol (delta-9-THC) concentration was determined to be ABOVE/BELOW the Laboratory's administrative threshold of 1% delta-9-THC.*
>
> *Note: Total delta-9-THC is a combination of delta-9-THC and delta-9-tetrahydrocannabinolic acid (delta-9-THCA). Analysis was conducted using a method that is known to cause partial conversion of delta-9-THCA, if present, to delta-9-THC and will contribute to the total delta-9-THC concentration. The laboratory is unable to determine if the reported tetrahydrocannabinol is derived from marihuana, hemp, or synthetically produced.*

Reports for items containing tetrahydrocannabinols for which an inference to the concentration was not determined will include the following, or similar:

> *Analysis was conducted using a method that is known to cause conversion of tetrahydrocannabinolic acids, if present, to tetrahydrocannabinols. The laboratory is unable to determine if the reported tetrahydrocannabinol is derived from marihuana, hemp, or was synthetically produced.*

Additional information may be located in the associated quality incident documentation now published on the Texas Forensic Science Commission website. *See* Search Quality Incidents for incident number QI-SYS-2025-0103-SD. These reporting changes do not apply to the analysis of plant material.

Your local Laboratory Manager will be providing a list of cases specific to your county. Please work with your local DPS laboratory if an amended report is requested with our new reporting statements. Requests will be evaluated on a case-by-case basis to determine if an amended report is warranted based on the analysis that was performed. Blanket requests for amended reports will not be accepted.

Sincerely,

Brady W. Mills, Chief
DPS Crime Laboratory Division