



STATE OF MICHIGAN
DEPARTMENT OF STATE POLICE
Forensic Science Division

GRETCHEN WHITMER
GOVERNOR

COL. JOSEPH M. GASPER
DIRECTOR

September 23, 2019

Mr. Kenneth Stecker (PACC-Contractor)
Ms. Kinga Canike (PACC-Contractor)

Dear Mr. Stecker and Ms. Canike,

Recently, I have had several conversations with prosecuting attorneys regarding measurement uncertainty and how it relates to toxicology reporting. For future reference, I would like to provide an explanation of why the Michigan State Police Toxicology Discipline does not report measurement uncertainty for THC. The Forensic Science Division is accredited by the ANSI (American National Standards Institute) National Accreditation Board (ANAB) to ISO 17025:2005. Maintaining that accreditation means that we must adhere to the requirements set forth in ISO 17025:2005, the "General requirements for the competence of testing and calibration laboratories".

There are hundreds of requirements that the laboratory must adhere to, however the requirement of interest is 5.10.3.1.

- 5.10.3.1 "In addition to the requirements listed in 5.10.2, test reports shall, where necessary for the interpretation of the test results, include the following:"
- c) "where applicable a statement on the estimated uncertainty of measurement; information on uncertainty is needed in test reports when it is relevant to the validity or application of the test results, when a customer's instruction so requires, or when the uncertainty affects compliance to a specification limit."

When considering 5.10.3.1 c), three separate components are present that dictate whether the laboratory must report measurement uncertainty.

First, when it is relevant to the validity or application of the test results. Measurement uncertainty is not required for the validity of the toxicology discipline's test results. The validity of the test result is demonstrated through validation of the analytical testing process. The toxicology discipline does not oversee the application of the test result. Our customers are responsible for the application of the test result.

Second, when a customer's instruction so requires. The toxicology discipline's primary customers are the law enforcement agencies that submit samples, and, to a lesser extent, the prosecuting attorneys. Neither the agencies nor the prosecuting attorneys have requested this information be included on the discipline's reports.

Third, when the uncertainty affects compliance to a specification limit. In the case of alcohol, there are specification limits, 0.08 g/100 mL and 0.17 g/100 mL. The toxicology discipline reports measurement uncertainty with all alcohol cases because of these specification limits. There are no specification limits associated with THC or THC-COOH, and thus no requirement to report measurement uncertainty.

Sincerely,

Nicholas Fillinger
Technical Leader
Toxicology Discipline

