

## TD2019DL: Summary of Major Modifications

The Technical Document on Decision Limits (DL) for the Confirmatory Quantification of Threshold Substances, has undergone a revision by WADA's Laboratory Expert Group (LabEG).

The new version of the document, TD2019DL, includes the following main modifications:

The term “analytical procedure” was replaced by “quantitative Confirmation Procedure” through the text of this TD.

### 1. Maximum Levels of Measurement Uncertainty

#### Table 1

A bar was placed over the digits of the DL for carboxy-THC, formoterol and pseudoephedrine to indicate the last significant figure.

Note c. was expanded to establish the value of the maximum allowed expanded uncertainty for the Specific Gravity (SG),  $U_{Max\_SG} = 0.002$  ( $U_{95\%}, k = 2$ ), which is incorporated in the DL correction formula.

Footnote 1 was added to specify that Laboratories shall measure  $SG_{Sample}$  in a single Aliquot of the “A” or “B” Sample during the Initial Testing Procedures and Confirmation Procedures, as applicable.

The SG value ( $SG_{Sample}$ ) to be used for the calculation of  $SG_{Sample\_Max}$  is that measured in the Laboratory with a digital refractometer using a Fit-for-Purpose Analytical Method, which shall be included within the Laboratory's ISO/IEC 17025 scope of accreditation.

If the digital refractometer reads to four (4) or more decimal places, the  $SG_{Sample}$  is the value obtained after rounding the refractometer value up to three (3) decimal places.

Footnote 2 was inserted to clarify that the  $SG_{Sample}$  cut-off value for adjustment of the DL has been set at 1.018 to account for the lower limit of the 95 % coverage interval, based on a two-tailed normal distribution, of a reference value of SG at 1.020 for normally hydrated individuals (calculated as  $1.020 - U_{Max\_SG}$ ). This value was updated through the text of this TD.

Footnote 3 clarifies that the adjustment of DL for the SG is not needed for “B” Sample confirmations of exogenous Threshold Substances.