

Deidre S. Gifford, MD, MPH Acting Commissioner



Ned Lamont Governor Susan Bysiewicz Lt. Governor

Environmental Health and Drinking Water Branch

DWS Circular Letter #2021-05

TO: All Connecticut In-state Certified Environmental Laboratories

FROM: Lori Mathieu, Public Health Branch Chief, EHDW Joei J. Mathieu²¹

DATE: January 11, 2021

SUBJECT: Determination of the Method Detection Limit (MDL)

The Environmental Laboratory Certification program (ELCP) currently requires certified laboratories to demonstrate instrument response to low level concentration standards by annually calculating the method detection limit (MDL). Effective January 2021 ELCP is adopting the EPA's MDL procedure which was published in 40 CFR part 136 on August 28, 2017. Over the course of the next six months all in-state certified laboratories should implement the procedure to be fully compliant by July 31, 2021.

The updated procedure has a few significant changes as well as a new definition of the MDL. The MDL is now defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. The procedure now uses method blanks in addition to spikes to determine the MDL, allows for data to be pooled from multiple instruments to create one MDL, and requires data from multiple dates to obtain a year's worth of representative data.

The detailed procedure and additional information can be found at <u>https://www.epa.gov/cwa-methods/methods-update-rule-2017</u>.

Please feel free to contact Dawn Shaban from ELCP at <u>Dawn.Shaban@ct.gov</u> or 860-488-0652 with any questions or for technical assistance.

cc: Deputy Commissioner Heather Aaron MPH, LNHA, Department of Public Health



