

WAC 16-309-220 Heavy metals testing. (1) Heavy metals testing is intended to accurately quantitate and report metals incurred through the production and processing of cannabis and cannabis products.

(2) Analytical standards and solutions must be National Institutes of Standards (NIST) traceable or equivalent.

(3) The ICP-MS must be tuned each day of analysis using a tuning solution containing elements representing all of the mass regions of interest.

(4) Instruments must be calibrated every day of testing using a minimum of a four-point curve (no blanks can be used as a point).

(5) Laboratories must use a method approved by the department to analyze heavy metals.

(6) A stabilizer must be added during sample preparation to stabilize mercury through the acid digestion and analysis. The stabilizer must be at the same level in the calibration standards as the samples.

(7) An internal standard (IS) must be added and analyzed in all calibration standards and samples.

(8) Spectral interference checks (SIC) must be used to verify that the interference levels are corrected by the instrument's data system. The SIC must contain known amounts of interfering elements that will demonstrate the magnitude of interference and test for any corrections.

(9) An initial calibration verification (ICV) and initial calibration blank (ICB) must be analyzed each day of testing.

(a) The ICB is analyzed after the ICV and must not contain target analytes.

(b) The ICV must meet a minimum of 70 - 130 percent recovery for each analyte.

(10) Laboratories must limit batch size to 20 samples in a preparation batch not including quality controls.

(11) CCV, surrogate, LCS, and matrix spike samples must meet a minimum of 70 - 130 percent recovery for each analyte.

(12) Sample duplicates and matrix spike duplicates must have a relative percent difference (RPD) value of less than 20 percent.

(13) Sample concentrations that exceed the highest calibration standard must be diluted and reanalyzed to fall within the linear calibration range.

[Statutory Authority: RCW 15.150.030 and 2022 c 135. WSR 24-09-079, § 16-309-220, filed 4/17/24, effective 5/18/24.]