

Question: EPA Method 323 Section 8.4.1 and Section 11.2.1 define the duplicate precision criteria as within 20 and 10 percent of their mean, respectively. However, Equation 323-3 calculates the percent difference as a relative percent difference. Which precision calculation approach is correct?

Answer: The text in Section 8.4.1 and Section 11.2.1 referencing precision in terms of % difference from the mean is correct and Equation 321-3, currently in the method, is not correct. The proper precision equation should be:

$$PD = \frac{\left[X_n - \left(\frac{X_1 + X_2}{2} \right) \right]}{\frac{X_1 + X_2}{2}} \times 100$$

Where:

PD = Percent difference of the mean

X_1 = Replicate number 1

X_2 = Replicate number 2

X_n = Replicate number 1 or 2

We intend to correct this error in our next test method update package. Please use the equation above until that correction can be made.