Review of NJDWQI Report on the Development of a Practical Quantitation Level for PFOS in Drinking Water

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The NJDWQI Testing Subcommittee determined that use of low calibration standards for PFOS among laboratories was the most appropriate performance standard to base a practical quantitation limit (PQL). Using low calibration standards of 19 laboratories that used either EPA Method 537, modified EPA Method 537, or a proprietary method, the Subcommittee applied bootstrap analysis (bootstrap estimate of a confidence interval of the mean) to determine an upper confidence limit of 95% for PFOS at 4.2 ng/L. (One laboratory with a low calibration standard above the upper confidence level (95%) was excluded.) The same methodology was applied to 12 laboratories using EPA Method 537 to determine an upper confidence limit (95%) of 3.8 ng/l. (Two laboratories were excluded from that analysis since their low calibration standards were outside the 95% confidence interval.)

The Subcommittee's methodology appropriately diverts from the prior or traditional use of developing a PQL on the basis of multiplication of the MDL (method detection limit) by a factor of 5, consistent with USEPA "trend" not to use MDLs to develop a PQL.

We concur with the Subcommittee's analysis that determined a PQL of 4.2 ng/l for PFOS. This PQL concentration is below the proposed MCL of 13 ng/l, and below the 5 ng/l that we assert is more protective.