

## Laboratory Guidance for Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Non-Potable Water and Solids

The Division of Environmental Remediation (DER) developed the following guidance for laboratories submitting PFAS data to DER. If laboratories cannot comply with any of the following requirements, they must contact Dana Maikels at <a href="maikels@dec.ny.gov">dana.maikels@dec.ny.gov</a> prior to analysis of samples.

- Standards containing both branched and linear isomers must be used when standards are
  commercially available. Currently, quantitative standards are available for PFHxS, PFOS,
  NMeFOSAA, and NEtFOSAA. All isomer peaks present in the standard must be integrated and
  the areas summed. Samples must be integrated in the same manner as the standards.
  - Since a quantitative standard does not exist for branched isomers of PFOA, the instrument must be calibrated using just the linear isomer and a technical (qualitative) PFOA standard must be used to identify the retention time of the branched PFOA isomers in the sample. The total response of PFOA branched and linear isomers must be integrated in the samples and quantitated using the calibration curve of the linear standard.
- Quantifier and qualifier ions must be monitored for all target analytes (PFPeA and PFBA are an
  exception). The ratio of quantifier ion response to qualifier ion response must be calculated for
  each target analyte and the ratio compared to standards. Lab derived criteria can be used to
  determine if the ratios are acceptable.
- 3. The ion transitions below must be used for the following PFASs:

PFOA	413 > 369
PFOS	499 > 80
PFHxS	399 > 80
PFBS	299 > 80
6:2 FTS	427 > 407
8:2 FTS	527 > 507
NEtFOSAA	584 > 419
NMeFOSAA	570 > 419

- 4. For all target analyte ions used for quantification, signal to noise ratio must be 3:1 or greater.
- 5. For water samples, the entire sample bottle must be extracted, and the sample bottle rinsed with appropriate solvent to remove any residual PFAS.
- 6. Detections below the reporting limit should be reported and qualified with a J qualifier.