



# Additional Source Air Methods Under Development

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- Reliable and comprehensive emission measurement methods – both targeted and nontargeted – are needed to measure volatile, semivolatile, nonvolatile, polar, and nonpolar PFAS for multiple purposes and sources
- The ability to measure PFAS as a class is a recognized Program Office need
- Field testing is critical to methods development and supports comprehensive source characterizations and technology evaluations
- Collaboration and partnership, both internal and external, is integral to these objectives and comes with challenges

- Evaluating canisters and thermal desorption tubes for polar and nonpolar volatile PFAS
  - Gas Chromatography/Mass Spectrometry analysis for targeted and nontargeted compounds
- High Resolution Mass Spectrometry nontargeted analyses (NTA) for polar and nonpolar volatile/semi-volatile/non-volatile PFAS
- Total Organic Fluorine (TOF) by combustion/ion chromatography
- Innovative real-time measurement approaches
  - FTIR, Time-of-Flight Mass Spectrometry
- Source measurement approaches may also be applicable to ambient measurements





# Current Status

- Canister method frequently used for volatile emissions testing and candidate for Other Test Method to be developed
  - Target PFAS analytes (30) representative of current interest (i.e., Products of Incomplete Combustion [PICs], industrial products, and more)
- NTA capabilities established and supporting multiple projects
- TOF method in early stages of development
  - Characterizing Combustion Ion Chromatography capabilities
  - Identifying candidate sampling sorbents
- Field evaluations still a critical need and difficult to access



# Contributors

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