

METHOD DEVELOPMENT AND WESTON'S CONTRIBUTIONS TO PFAS STATE-OF-SCIENCE

Between 2007 and 2021, Weston and Eurofins established themselves as leaders in PFAS air emissions testing by pioneering innovative methods and collaborating to develop sampling systems for highly volatile PFAS. Our work was accepted by regulatory agencies and is now the basis for the EPA's Draft OTM-045 PFAS source test method.

Performed PFAS air emissions testing project prior to PFAS stack sampling 2007 becoming a focus of regulatory agencies.

2016

2017

2019

2020

2021

Performed PFAS air emissions testing project in New Hampshire, which confirmed air deposition as a potential pathway for groundwater contamination.

Weston and Eurofins pioneer a PFAS air emissions testing method, a Modified EPA Method 0010 sampling train, which receive North Carolina Department of Environmental Quality (NCDEQ) acceptance and the basis of EPA's Draft OTM-045 PFAS source test method.

Established ourselves as a leader in PFAS testing abilities with a record of 300+ 2018emissions tests on scrubbers, air strippers, oxidizers, and carbon bed control 2019 systems.

Solidified our position as the leader in the development of PFAS air emissions testing method by collaborating with Eurofins to develop a cryogenic version of a Modified EPA Method 18 sampling system for highly volatile, short-chain PFAS. This system received NCDEQ acceptance.

Conducted the first state-mandated compliance test on a thermal oxidizer for PFAS emissions control using the Modified EPA Method 0010 and Modified EPA Method 18, two sampling methods developed specifically for PFAS testing in air sources.

Pennsylvania released Draft Method OTM-45 based on the methodology Weston and Eurofins developed over a 2-year period.

UNPARALLELED **EXPERIENCE**

- Completed 35+ PFAS air emissions testing projects since
- Proven QA procedures to minimize and eliminate background contamination.
- Conduct testing for landfill engines and flares, chemical manufacturing, coating operations, sewage sludge incineration, carbon regeneration units, and batch reactors.
- Provide nationwide PFAS emissions testing experts, scientists, and technicians.
- Developed focused safety procedures to handle cryogenic sampling systems and high-concentration, positive-pressure gas streams.
- Perform PFAS removal efficiency testing of emissions controls systems.
- Develop testing plans to evaluate multiple operation scenarios to gain a comprehensive understanding of different operational practices.
- Successful execution of quick turnaround projects, supplying verified data within 14 days.

PFAS AIR EMISSIONS SUCCESS

CONFIDENTIALITY AND CREDIBILITY

We understand the sensitive nature of PFAS testing programs and value your trust. We handle data with the utmost confidentiality. We also provide the confidence you need by applying extensive quality assurance/quality control (QA/QC) procedures to the sampling and reporting of PFAS, including the validation of analytical data, to produce credible, accurate, and defensible data.



Chemical Manufacturing Facility

- Assembled and mobilized test teams quickly and provided rapid turnaround of results while adhering to stringent QA and safety procedures.
- Performed 25+ PFAS air emissions testing projects at this facility consisting of hundreds of test runs.
- Measured target PFAS concentrations using methods customized specifically for the client.
- Sampled at inlet and outlet locations of air pollution control devices including wet scrubbers, carbon adsorption units, and thermal oxidizers.
- Sampled for PFAS in ambient air entering building HVAC systems.

The performance of this testing has been essential for the facility to continue operations, ensure the safety and health of its employees, and comply with regulatory requirements.



Material Coating Facility

- Performed stack sampling to measure PFAS listed in EPA Method 537.1.
- Sampled and analyzed PFAS content of coating materials in process dip pans.
- Collected samples of resin buildup on lining of stacks for composition analysis for PFAS content.

The data collected enabled state regulators to make informed decisions about the sources of PFSA and PFCA in drinking water supplies, to provide the public with up-to-date and accurate information, and to determine the next steps to address risks to human health and the environment



Sewage Sludge Incinerator

- Performed stack sampling to measure emissions of 25 target PFAS analytes from a fluidized bed incinerator.
- Measured emissions of total fluoride, hydrogen fluoride, fluorine, and carbonyl fluoride.
- Measured emissions of volatile PFAS using cryogenic sampling systems

Emissions testing results were used as part of an overall first-of-its-kind, facility-wide PFAS mass balance evaluation.

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