



Plant Material (Agricultural) PT (Q2–Q3 2026)

Purpose: Establish whether AIHA PAT Programs can run a realistic PT pilot using a plant-based matrix that challenges sample prep and matrix effects.

- Dried, homogenized plant matrix
- Pesticide residues (LC-MS/MS, GC-MS/MS), heavy metals/trace elements (ICP-MS/OES/AA), biological contamination

Microplastics PT (Q3–Q4 2026)

Purpose: Provide a method-inclusive PT pilot that benchmarks laboratory performance for microplastics extraction, particle identification, and reporting.

- Water matrices (spiked drinking or source water)
- Methods: Raman, micro-FTIR/FTIR, microscopy + confirmation, Pyrolysis-GC/MS
- Reporting tracks for particle counts and, where applicable, mass-based results

PFAS PT (Q4 2026–Q1 2027)

Purpose: Provide a pilot study that supports laboratories measuring PFAS under emerging and existing regulatory pressure, starting with drinking water.

- LC-MS/MS aligned with EPA 533, 537.1 (drinking water)
- Potential expansion to EPA 1633/1633A
- Aggregate organofluorine screening: EPA Method 1621 AOF by combustion ion chromatography (CIC).

Combustion Particles PT (Q4 2026–Q2 2027)

Purpose: Run a qualitative identification pilot that evaluates whether laboratories can consistently identify and differentiate soot, char, and ash (and potentially related combustion residue indicators) using microscopy workflows relevant to wildfire/structure-fire residue investigations.

- Qualitative identification of soot, char, and ash
- Microscopy-focused (reflected light + transmitted/polarized recommended)
- Designed for fire residue/impact assessment workflows

Dates are estimates and may shift based on sample feasibility. Participation is limited.

