

Ambient Air



RTI International provides quality support for ambient air monitoring operations, from sampler set-up and training to data processing and management. Using advanced facilities and instrumentation, RTI's experienced scientists perform rigorous analysis and provide logistical support tailored to client monitoring network needs.

Environmental Analyses of Ambient Air

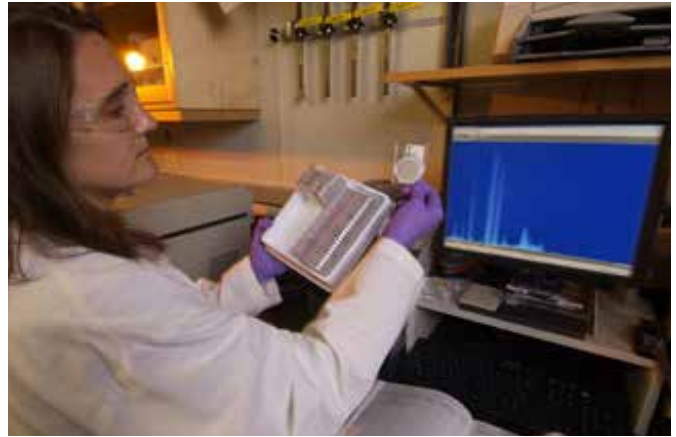
- **Sample processing facility**
- **Gravimetric mass analysis** specialized in FRM and FRM-compliant data quality, providing both routine and unexpected event support.
- **Ion analysis** of anions and cations in filter and denuder extracts by ion chromatography
- **Organic carbon/elemental carbon** and carbonate carbon by National Institute for Occupational Safety and Health method 5040, CSN, and IMPROVE_A methods
- **Elemental analysis** to ultra-trace levels by ICP-MS, EDXRF, WDXRF, and XRD
- **Microscopy** for physical and chemical particle characterization by transmission electron microscopy and variable-pressure scanning electron microscopy
- **Organic analysis** of semi-volatile compounds in filter and denuder extracts by gas chromatography–mass spectroscopy
- **Black carbon analysis** by optical density
- **Passive Sampling Devices** prepared and analyzed for monitoring of pollutant gases: NO₂, NO_x, SO₂, NH₃, and O₃
- **Fenceline monitoring** for organic compounds

Field and Administrative Support

- Sampler system support
- Logistical support of field monitoring programs
- Data reduction and review
- Facilities designed to prevent environmental contamination
- Experienced analytical staff trained to support regulated studies
- **Quality assurance program** development and implementation in accordance with regulatory guidelines (both internal and external clients)
- Perform Lab and Field **Technical Systems Audits**, administer round-robin evaluations, and develop quality
- Environmental analysis, methods development, validation, and application
- Ability to leverage other RTI research capabilities (e.g., biostatistics, aerosol and microbial science, and health science) to formulate a “total package” deliverable

Choose RTI for Ambient Air Solutions

RTI has extensive, long-standing experience and capabilities in providing customized solutions in air monitoring networks and particulate matter analysis. Our expert scientists are actively working with federal, state, and commercial entities to strengthen our collaborations and stay abreast of ambient air regulations. RTI also works with international clients and provides capacity-building efforts to help build their programs.



More Information

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RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Clients rely on us to answer questions that demand an objective and multidisciplinary approach—one that integrates expertise across the social and laboratory sciences, engineering, and international development. We believe in the promise of science, and we are inspired every day to deliver on that promise for the good of people, communities, and businesses around the world. For more information, visit www.rti.org.

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