Hilary R. Hafner

Chief Operating Officer

At Sonoma Technology since 1989, Ms. Hafner is the company's Chief Operating Officer. Her technical responsibilities include supporting and overseeing data analysis and field projects to meet clients' objectives and needs. She serves as Principal Investigator, Senior Advisor, or Project Manager on projects involving air quality and meteorological monitoring in support of facility permits, testing and deployment of low-cost sensors, developing quality assurance project plans, and providing community monitoring guidance on sensor use. Her research interests include air quality data validation, data analysis, data visualization, and training covering hydrocarbons (from programs such as the Photochemical Assessment Monitoring Stations [PAMS]), hazardous air pollutants (HAPs), and criteria pollutants.

U.S. EPA Support. Ms. Hafner has been Principal Investigator, and often served as Project Manager, on more than 30 U.S. Environmental Protection Agency (EPA) support contract work orders, including national analysis of HAPs; air quality instrument standard operating procedure development; low-cost sensor support; tool development to facilitate exceptional events demonstrations by quantifying ozone impacts from smoke; and monitoring network assessments.

Guidance Documents and Training. Ms. Hafner has led several projects to develop guidance documents on air quality topics including operational data review, near-roadway air pollutant monitoring, monitoring network assessments, and best practices for developers and users of low-cost sensors.

Ms. Hafner is actively involved in training other air quality professionals in data validation, analysis, and interpretation. She is also involved in outreach work with low-cost air quality sensors, including developing a Sensor Guidebook and videos, to aid communities seeking to better understand local air quality. She had a principal role in planning, developing, and presenting training workshops for EPA and state air agencies, including (1) planning a successful HAPs monitoring project, (2) HAPs data analysis, (3) PAMS and $PM_{2.5}$ data analysis, (4) monitoring network assessment techniques, and (5) criteria pollutant, PAMS, and HAPs data validation. Ms. Hafner has also co-conducted HAPs emissions inventory development, source apportionment, and statistical software training.

Data Analysis. Ms. Hafner has played a major role in numerous topical projects, including demonstrating exceptional events for PM_{10}, $PM_{2.5}$, and ozone, and assisting Jiangsu Province, China, in developing an air quality management plan for $PM_{2.5}$ for the U.S. Trade Development Association "Feasibility Study for the China Air Quality Management Program" (as a subcontractor to RTI). She has led data analysis projects that involve developing, managing, and validating air quality data sets; developing innovative graphical methods to display data; integrating air quality and meteorology; and documenting and presenting analysis results. Ms. Hafner also leads efforts to communicate complex technical problems to broad audiences.

Prior to graduate school, Ms. Hafner was a research engineer with Chevron Research Company in the Engineering Research and Development Division's Environmental Group, performing emergency response modeling of sudden releases of hazardous chemicals.

Ms. Hafner is actively involved in U.S. Masters swimming.

Education

- MS, Chemical Engineering, University of California, Los Angeles
- BS, Chemical Engineering, Oregon State University

Memberships

- Air & Waste Management Association (AWMA)
- Co-chair, AWMA's 2010 Symposium on Air Quality Measurement Methods and Technology

For a list of publications, see **sonomatech.com/ResPub/HRHpub.pdf**.