Tim Dye
President

Profile

Tim Dye is a visionary and entrepreneur with over 35 years of experience creating innovative programs for air quality applications that make air quality approachable and understandable. In 2017, Tim founded TD Environmental Services (TD Enviro), which specializes in collecting and analyzing data using air monitors to provide insights about the air we breathe. At TD Enviro, he combines novel technologies and sound science to work on practical and cutting-edge air quality applications. He is a widely recognized leader in air quality sensor technologies for environmental applications and is respected as an independent voice in the air monitoring community. A visionary and an entrepreneur, he has created many operational air quality programs that provide custom and routine air quality services.

Before founding TD Enviro, Tim held many executive and management positions at Sonoma Technology, where he led teams to develop creative, custom programs focused on air monitoring, data management systems (AirNow.gov), data analysis, and public education. At TD Enviro, Tim uses his creativity and deep experience to empower organizations to use air monitoring to collect high-quality data for various applications. His knowledge of the air monitoring ecosystem, companies, and experts worldwide allows him to create the best solutions for his clients, including foundations, community groups, private companies, and government organizations.

Tim is dedicated to continuing his education and expanding his awareness of the challenging environmental realities many communities face, many of which are due to structural injustices. He has taken training in working with environmental justice communities and continues to pursue more. For example, he has attended Equitable Community Engagement and Collaborative Problem-Solving and Conflict Resolution, taught by Metropolitan Group.

Technical Assistance Centers

Over the past five years, Mr. Dye has developed various technical support centers for City, Local, and State governmental agencies. These centers provide comprehensive technical assistance to community groups, NGOs, and the public that is approachable and useful for addressing air quality issues. Examples include leading the Bay Air Center for the Bay Area Air Quality Management District, which is a community resource that provides technical guidance, materials, and training to community members and organizations, free of charge, to support their efforts to understand and improve air quality. For state air quality agencies in the Mid-Atlantic and Northeast U.S., Tim has led TD Enviro's effort to share information and best practices regarding community-based air monitoring and community engagement for overburdened communities. In addition, this effort has developed frameworks and training to better equip state air quality staff for more meaningful engagement with community groups. Working with the City of Denver, Tim has helped develop the innovative air monitoring and outreach program Love My Air, which provides diverse communities with visible, accessible, and actionable air quality information.

Training and Capacity Building

Tim has a long history of developing innovative educational and training products and services. Examples span training community groups, teachers, and newly hired government staff. With these efforts, Tim strives to share the knowledge he's accumulated in the past 35 years in air quality. Some examples include providing community groups with training on the fundamentals of air quality as part of the Bay Air Center. Recently, Tim has developed the All About Air Quality Bootcamp in partnership with the Coalition for Clean Air to educate community advocates. It is a two-day interactive workshop to learn about all the different aspects of air quality, from pollutants to emissions, health effects, regulations, and environmental justice in air quality spaces. In addition, we developed guidance for the U.S. EPA, such as their Air Sensor Guidebook and a Community Guide

to selecting a Data Management System. Lastly, Tim has 15 years of youth education and teacher training and developed an air quality curriculum for Denver Public Schools, East Side High School District (San Jose), and Sonoma County Schools.

Air Monitoring

Mr. Dye is a widely recognized leader in air monitoring applications. For over ten years, he has led many efforts to evaluate and test air sensors to understand how organizations could employ this new, rapidly changing technology most effectively. Mr. Dye built air quality sensing systems for fixed and mobile applications, conducted studies evaluating and quantifying sensor performance, and developed analytics to create information from sensor data. He brings an objective, independent, and purpose-driven approach to designing and operating air monitoring studies. For the Bay Air Center, Tim has helped community groups like Greenaction and Vallejo Citizen Air Monitoring Network to design, update, and utilize their air monitoring networks. As part of the AQEarth project, Mr. Dye has designed hybrid air monitoring networks for cities (Fort Collins, CO, and Anchorage, AK), a community group in Atlanta, and TriChapers of the Navajo Nation to meet very different local air monitoring objectives. Tim guided the World Resource Institute staff in São Paulo, Brazil, through all aspects of using low-cost air sensors to address pollution from transportation sources. In India, Tim designed a community-led study on Air Quality in Indore City as part of the USAID-funded Building Healthy Cities Project. This effort involved designing the air sensor study, selecting accurate sensors, and interpreting data. These capacity-building projects cover all aspects of using sensors, including setting objectives, developing data quality objectives, selecting and deploying sensors, managing and analyzing data, and more. Community groups, governments, and others worldwide seek Tim's experience and strategic insights on air quality sensing.

Data Management and Analysis

Tim has specialized in designing and developing powerful information systems for air quality applications and public communication for over two decades. He is an internationally recognized leader in developing air quality information systems like the EPA's AirNow program. Tim led an effort to create a data management system to ingest, process, and display air quality sensor data for the City of Denver and other clients to provide real-time air quality information to schools and decision-makers. Currently, Tim is working on strategies to develop community-based methods to manage air quality data.

Landscape Assessments

Mr. Dye has conducted several landscaping projects to assess the current state of play and develop strategies and recommendations. For a Bloomberg project on air sensor certification/standardization, Mr. Dye surveyed cities to identify their needs and interest in low-cost sensors. He assessed the current state of certification and standardization programs for low-cost air quality sensor systems worldwide. He performed a gap analysis of the current needs and state of certification to identify how to accelerate efforts to improve this situation for cities. In a project for the Clean Air Fund, Mr. Dye conducted a landscape assessment of air sensor applications for India, performed a gap analysis, and made recommendations for using this new technology to strengthen research, aid in decision and policy-making, and ultimately, improve air quality. He interviewed key stakeholders to identify the current state of the science and determine critical needs.

Education and Certifications

MS, Meteorology, Pennsylvania State University Certified Consulting Meteorologist (#619)
BS, Meteorology, Millersville University of Pennsylvania