# Timothy S. Dye, CCM
*Founder*

**TD ENVIRONMENTAL SERVICES**
*Air quality sensing, analytics, and insights*

## Profile

Tim Dye is a visionary and entrepreneur with over 25 years of experience creating innovative and sustainable programs for air quality and meteorological applications. In 2017, Tim founded TD Environmental Services (TDE), which specializes in collecting and analyzing data using new technologies to provide insights about the air we breathe. At TDE, he develops novel solutions for air quality and weather challenges by applying cutting-edge technologies, performing in-depth analyses, and clearly communicating insights.

Prior to founding TDE, Tim held a number of executive and management positions at Sonoma Technology where he led teams to develop creative, custom programs focused on meteorological measurements, data analysis, air quality forecasting, data management systems, and public education. He has a proven ability to transform traditional programs by fusing technology, creativity, and leadership.

## Air Sensors

Tim is a widely recognized leader in air sensor and Internet of Things (IoT) technologies for environmental applications. For over 8 years, Tim led a broad range of efforts to evaluate and test air sensors to understand how organizations could most effectively employ this new and rapidly changing technology. He built air quality sensing systems for fixed and mobile applications, wrote the U.S. EPA's guidebook on air quality sensors, conducted studies to evaluate and quantify sensor performance, and developed analytics to create information from sensor data. He regularly provides strategic insights and landscape analyses on air quality sensing to a wide range of product and service companies.

## Data Management and Analytics

For over two decades, Tim has specialized in designing and developing powerful information systems for air quality applications and public communication. He is an internationally recognized leader in the development of air quality information systems like the EPA AirNow program. Tim spearheaded efforts to expand the geographic coverage of EPA's AirNow program and identified and implemented methods for publishing real-time air quality data. Tim also organized and developed a community of practice around the AirNow program that is inclusive, forward thinking, and responsive to the more than 2,000 individuals involved in supplying real-time data and forecasts to the program. In 2013, Tim led a team of software engineers to develop a real-time data system for the U.S. State Department's Embassy in Beijing to publish real-time air quality data to the world via StateAir.net. With his ability to conceptualize data systems and build community through data sharing, Tim led the Cyberinfrastructure for Air Quality (CyAir) project for the EPA. Tim and his team assessed air quality data availability, exchange, and interoperability then outlined a future air quality cyberinfrastructure and performed a gap analysis between the current state and the future vision.

## Innovation

Tim has a long history of developing innovative products and services. Examples include: an automated system to forecast air pollution by statistically adjusting model predictions; SmogCity2, an on-line game that simulates the cause-and-effect relationships between air quality and weather, emissions, and population; a social networking system that provides a clearinghouse for air quality communicators to exchange and share information; and a program that uses new sensing technologies to educate students about air quality.

## Education and Certifications

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