Instruments Checking the Validity of Air Sensors

System Overview

Air quality monitoring is undergoing a technological revolution that enables community groups and individual citizens to measure air quality with "air sensors." These new devices are less expensive and easier to deploy than traditional, federally managed air monitors. To help communities collect accurate data with air sensors, the Bay Air Center developed a portable Sensor Verification System (SVS) to quantify the performance of sensors relative to reference (or near reference) instruments.

The SVS is a self-contained, portable, weather-resistant, and easy-to-operate instrument system. It can be set up in less than ten minutes and moved from one site to another in a vehicle or truck. SVS measures the following pollutants and weather parameters:

- Ozone (O₃)
- Nitrogen pollutant (NO₂)
- Particulate Matter (PM_{2.5})
- Black Carbon (BC)
- Temperature
- Humidity
- Wind speed
- Wind direction



Requesting the SVS

The SVS may be available to groups with air sensors to check their devices. The Bay Air Center can provide support to groups seeking to collect high-quality data.

About the Bay Air Center

The **Bay Air Center** is a Bay Area Air Quality Management District-sponsored community resource for community-based organizations that have received a California Air Resources Board (CARB) Community Air Grant or an Environmental Protection Agency (EPA) Enhanced Air Quality Monitoring for Communities Grant. The Bay Air Center provides technical guidance, materials, and training to Bay Area community members and organizations, free of charge, to support their efforts to understand and improve air quality.