



Air Quality Monitoring Performance Targets¹

Application	Pollutants	Precision & Accuracy ²	Examples	Supporting Documentation
Regulatory or compliance monitoring, Air toxics monitoring ³	Ozone, PM2.5, CO, NO2, SO2, Lead, VOCs, HAPs ³	+/- 10%	Filter-based FRM ⁴ sampler, Continuous FEM ⁵ PM monitor, FEM ozone analyzer, EPA laboratory protocols	40 CFR parts 50, 53, and 58, National Air Toxics Trend Station Technical Assistance document
Supplemental monitoring, Special studies, Real-time Air Quality Index	Ozone, PM2.5, H2S, VOCs, Meteorology	+/- 20%	Nephelometer, E-BAM, H2S monitor for odors, Calibrated met station, Sensor-based with quality control and validation	Organization's approved quality assurance plan or sampling analysis plan
Area and source surveys, Screening; Fenceline monitoring, Personal exposure	Ozone, PM2.5, NO2, VOCs, Meteorology	+/- 30%	Calibrated sensors, Home met station	EPA Air Sensor Toolbox
Information, Education, Community monitoring	Ozone, PM2.5, NO2, CO, VOCs and others	+/- 50%	Low-cost sensors, Personal monitors	South Coast AQMD Air Quality Sensor Performance and Evaluation Center

1 This document is for informational use only. DEQ makes no claim, warranty or guarantee of instrument performance when operated by users for their specific applications.

2 These guidelines are likely to evolve as technology and science advance.

3 Hazardous air pollutants or air toxics

4 Federal Reference Method

5 Federal Equivalent Method