NO_2, CO, AND SO_2

TRENDS IN NO_2, CO, AND SO_2 CONCENTRATIONS

Nationally, concentrations of nitrogen dioxide (NO_2) decreased 27 percent between 2001 and 2008, as shown in Figure 25. In 2008, NO_2 concentrations were the lowest of the eight-year period. All recorded concentrations were well below the level of the annual standard (0.053 ppm).

Nationally, concentrations of 8-hour carbon monoxide (CO) decreased 41 percent between 2001 and 2008, as shown in Figure 26. In 2008, CO concentrations were the lowest in the past eight years. All concentrations were below the 8-hour standard (9 ppm) and 1-hour standard (35 ppm).

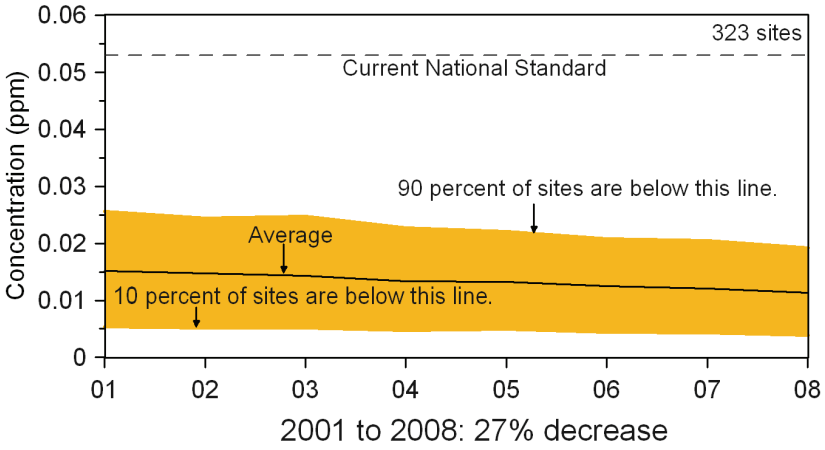

Figure 25. National NO_2 air quality trend, 2001-2008 (annual average in ppm).

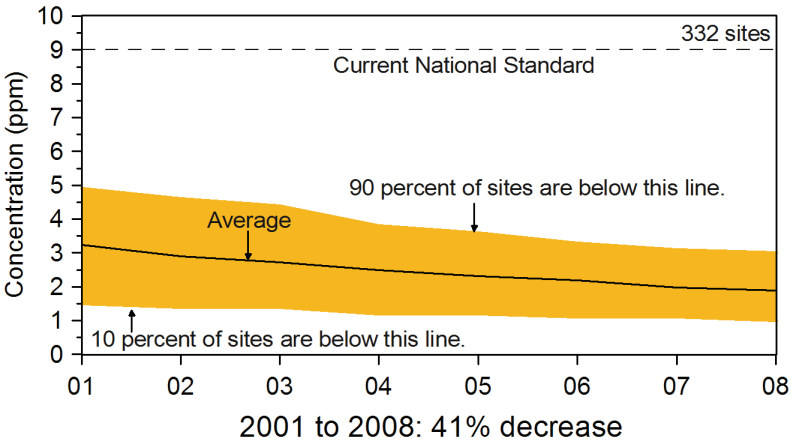

Figure 26. National CO air quality trend, 2001-2008 (second maximum 8-hour average in ppm).

Nationally, concentrations of sulfur dioxide (SO_2) decreased 30 percent between 2001 and 2008, as shown in Figure 27. In 2008, annual SO_2 concentrations were the lowest of the eight-year period. One site in Hawaii showed concentrations above the level of the annual standard (0.03 ppm) and two sites in Hawaii showed concentrations above the level of the 24-hour standard (0.14 ppm). These high measurements were caused by emissions from a nearby volcano.

Downward trends in NO_2, CO, and SO_2 are the result of various national emissions control programs. Even though concentrations of these pollutants are low with respect to national standards, EPA continues to track these gaseous pollutants because of their contribution to other air pollutants (e.g., ozone and $PM_{2.5}$) and reduced visibility. Additionally, national ambient air quality standards for these pollutants are under review.

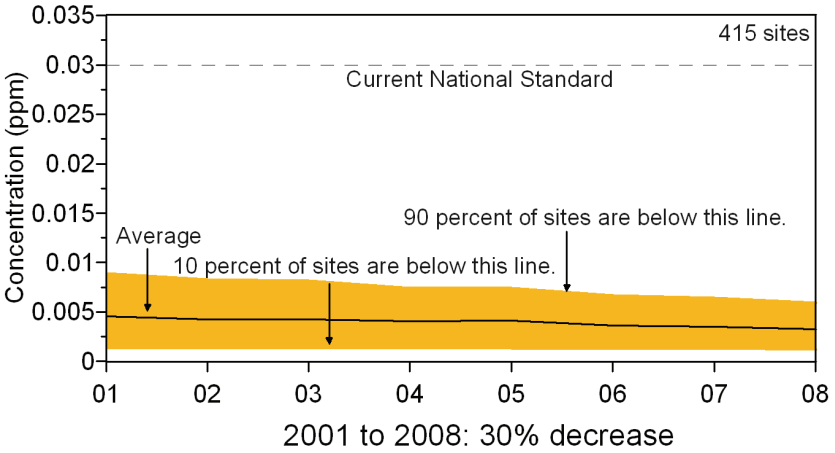

Figure 27. National SO_2 air quality trend, 2001-2008 (annual average in ppm).