

# San Fernando Valley Air Quality Trends

## MOST SAN FERNANDO VALLEY AIR QUALITY MEASURES IMPROVE IN 2006

**Most Valley air quality indicators show improvement in 2006 but ozone pollution increased in both the East and West Valley and larger particulates concentrations rise in the East.** Carbon monoxide, nitrogen dioxide, sulfur

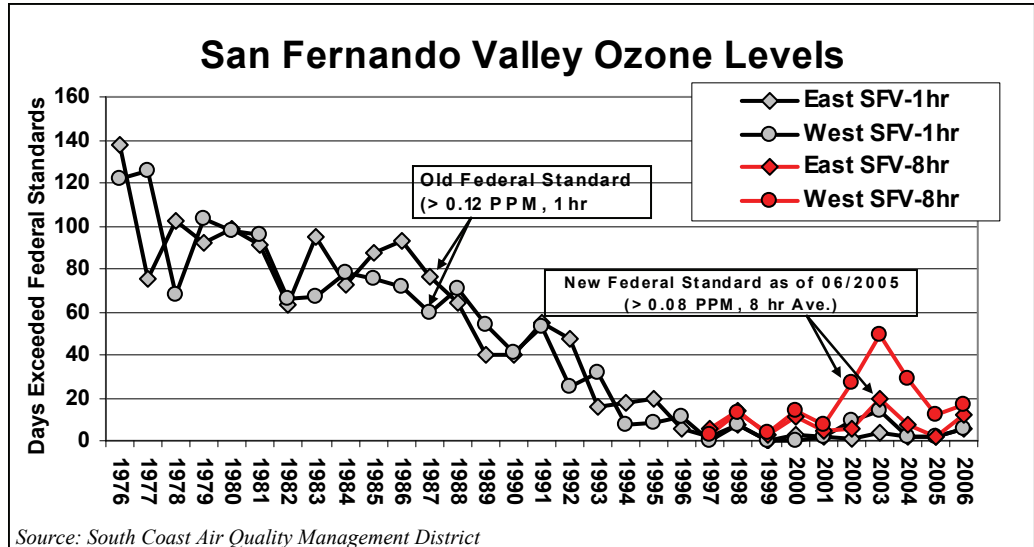
dioxide, sulfate, and lead all fell or remained at insignificant levels in 2006. With the exception of ozone and particulates, all pollution measures fell well below federal and state standards, and measured concentrations of each either fell in 2006 or remained at insignificant levels. Ozone and larger particulates did not follow the general downward trend and remained above minimum standards.

### Ozone Pollution Increases:

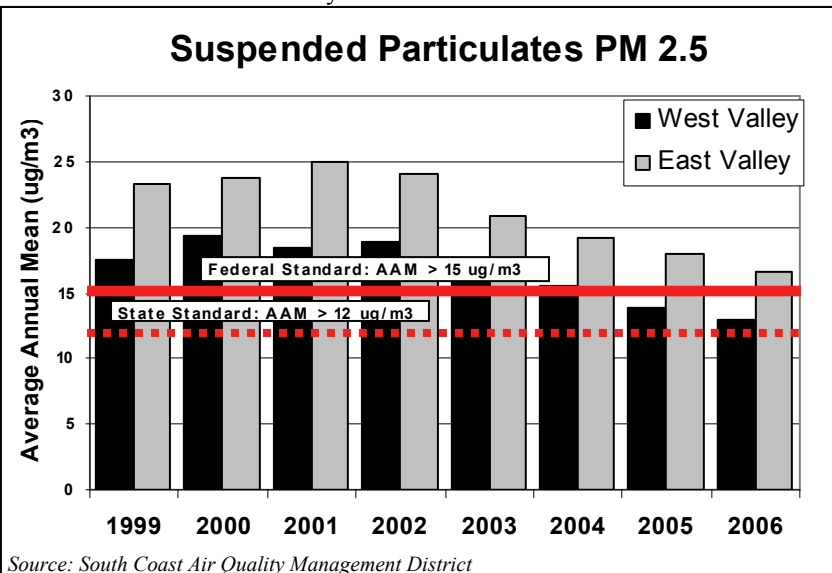
In 2006 ozone pollution exceeded the new federal standards for 17 days in the West Valley and 12 days in the East Valley in 2006, up 12 days and 2 days respectively in 2005. The new federal standards, effective in the Basin in 2005 but measured here since 1997, put the maximum ozone concentration at an average of 0.08 parts per million (PPM) for an 8 hour period. The 2006 increase in days in excess of the new fed-

eral standard reverses the decreasing trend in 2004 and 2005 for both East and West Valley sites. Neither site exceeded its previous peak in the 1997-2006 period, but the 2006 ozone violation days for both sites exceeded those for most of the years in that period (see the Ozone Levels graph).

The Ozone graph also shows the old ozone standard, which was less stringent in that it allowed ozone up to 0.12 PPM average for a 1 hour period. The graph shows the remark-



able fall in the days in violation of the old standard from the mid-1970s through the mid-1990s. But recent measurements show an increase in the days in violations of the old federal in 2006, up from 2 days in both the East and West Valleys in 2005 to 6 days of violations in both locations in 2006.



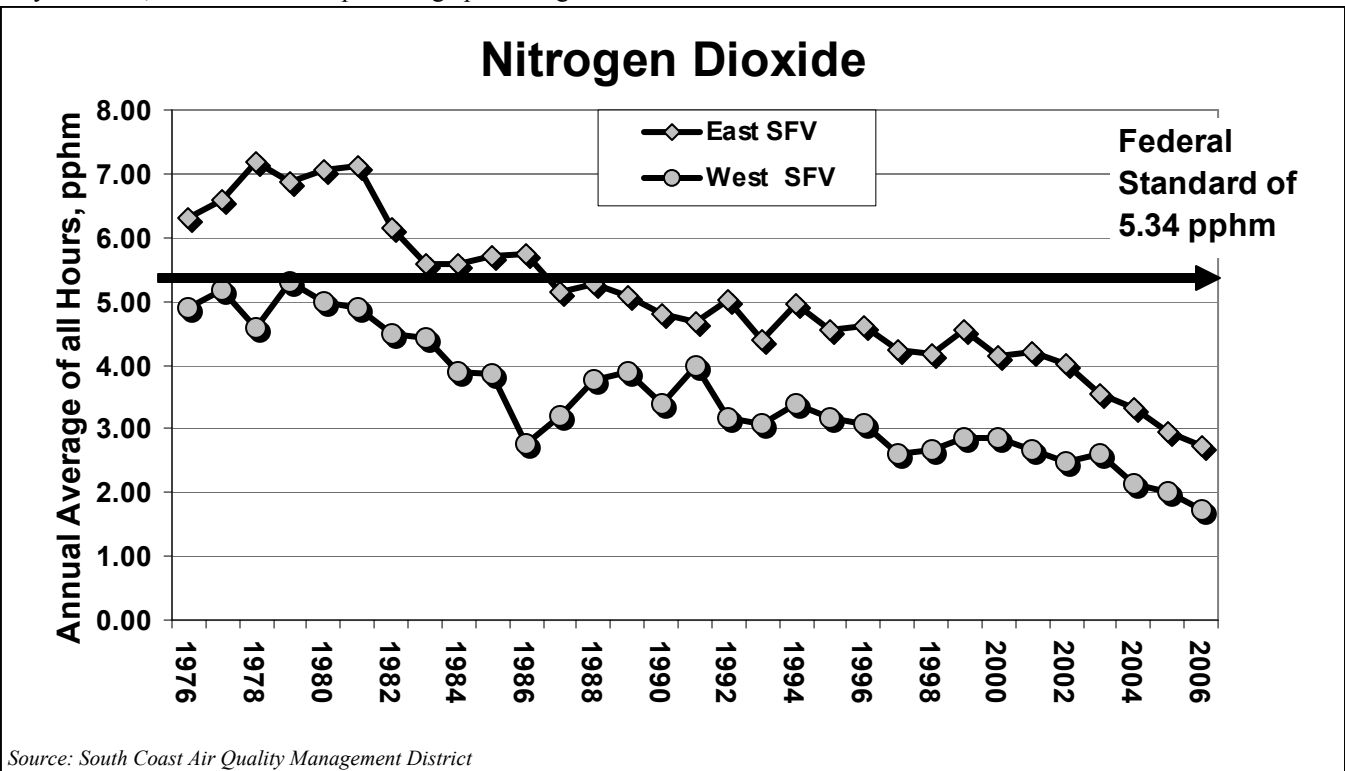
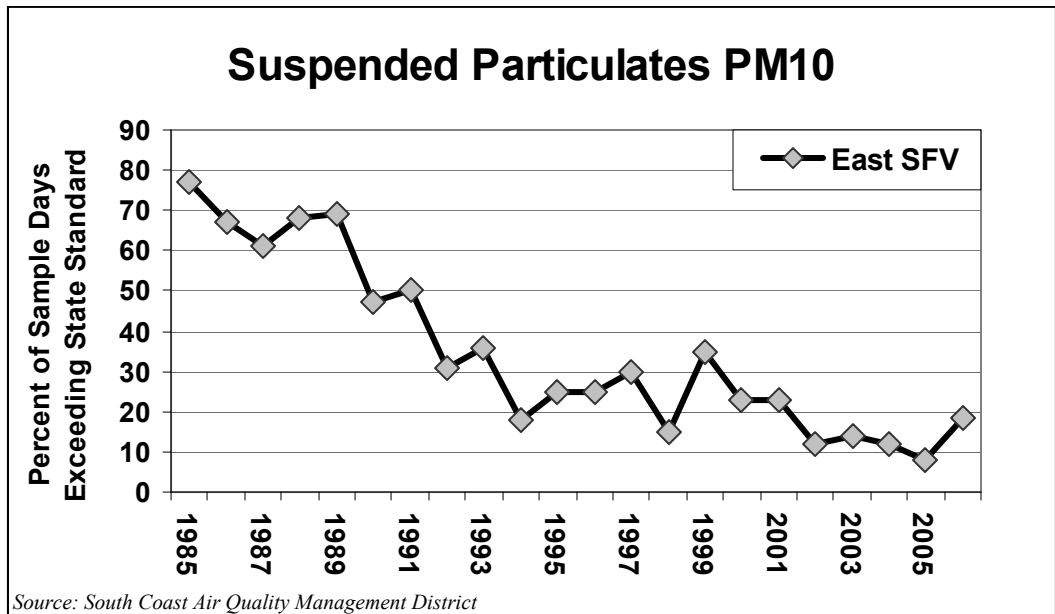
**Particulates:** There are two different measures of particulate pollution depending on particle size. The PM 10 measure refers to the presence of suspended particles that are 10 micrometers in diameter while the PM 2.5 refers to the presence of particles that are 2.5 micrometers in diameter. Moreover, the PM 2.5 particles are considered more dangerous since these smaller particles can more easily get past the body's filtration system and become embedded in the lungs. One can think of dust as typical of PM 10 particles and smoke as typical of the PM 2.5 particles.

**PM 2.5:** Suspended PM 2.5 particulates in the West Valley dropped to 12.9 micrograms per cubic meter in 2005 which is well below the federal standard of 15 micrograms but

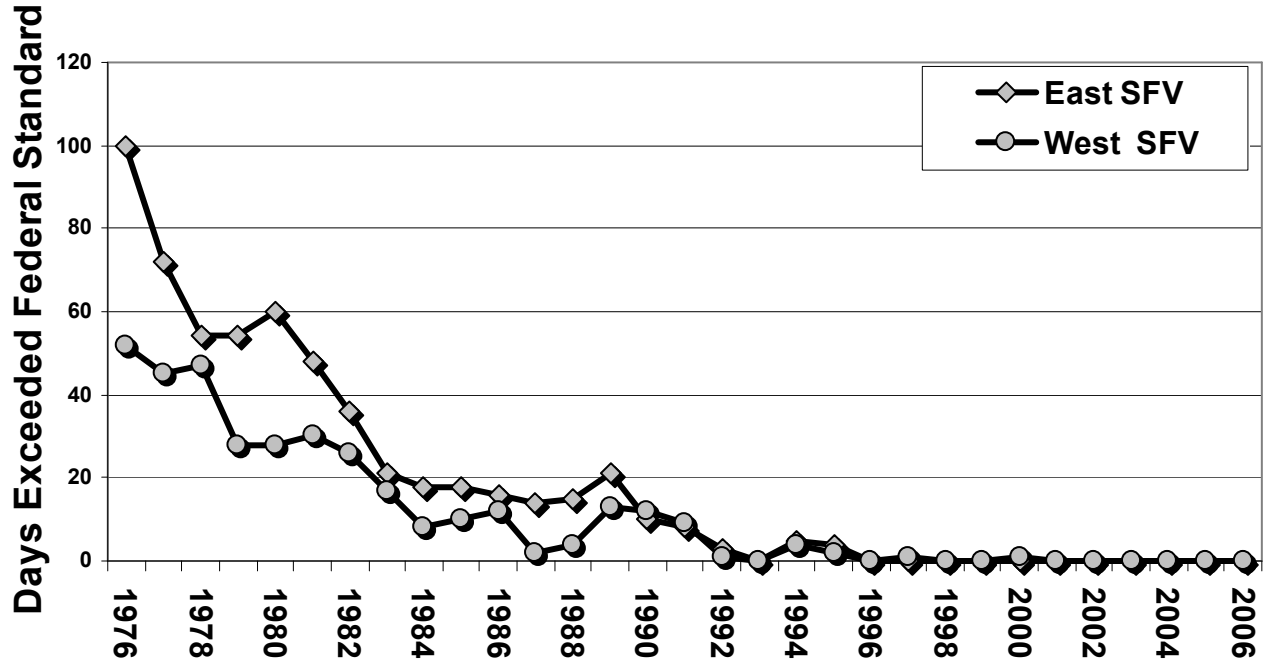
slightly above the more stringent state standard of 12 micrograms. The annual average for West Valley PM 2.5 in 2005 measured 13.9 micrograms per cubic meter. The East Valley PM 2.5 level averaged 16.6 micrograms annually in 2005 which lies above both the state and federal standards, but below its 2005 level of 17.9 micrograms.

**PM 10:** The Federal standard for PM 10 at 150 micrograms per cubic meter for a 24 hour period is considered lax but the State standard of 50 micrograms per cubic meter is considered stringent. PM 10 concentrations, which are only measured in the East Valley, did not exceed the Federal standard in 2006 (and have not in a number of years) but did exceed the State standards for 18.5 percent of sample days in 2006, which is over 10 percentage points higher

than the East Valley's 8.2 percent of sample days in 2005. In fact, the East Valley's 2006 percentage of days in violation is the highest percentage since 2001.

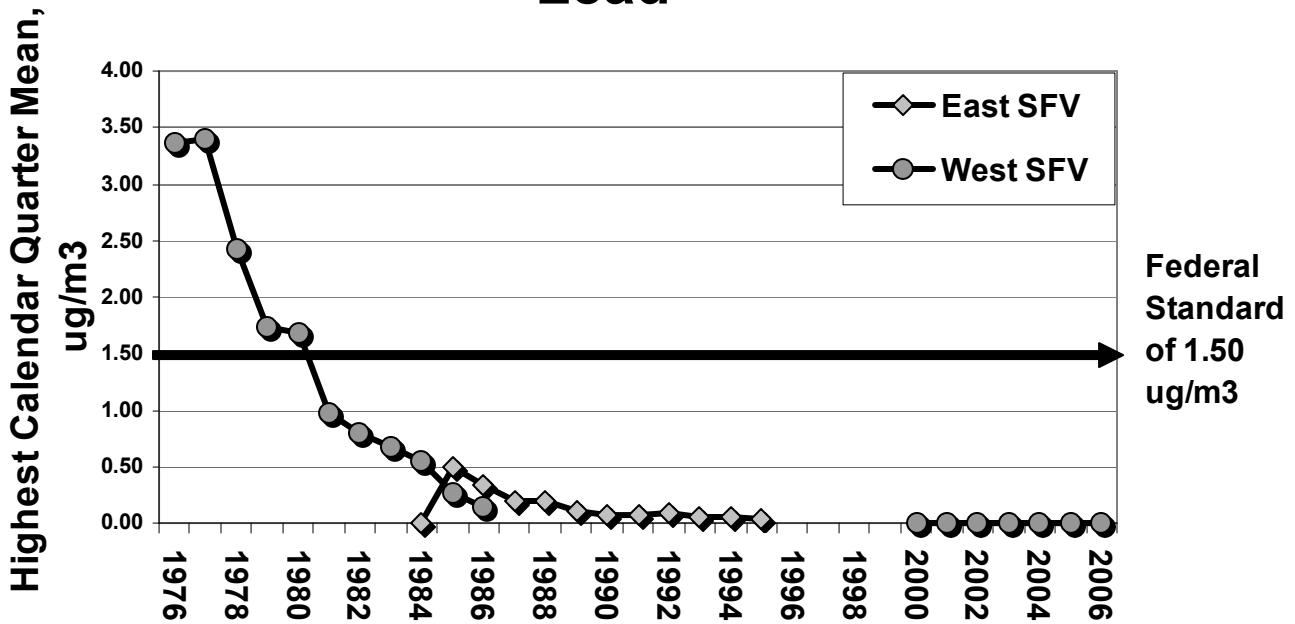


## Carbon Monoxide



Source: South Coast Air Quality Management District

## Lead



Source: South Coast Air Quality Management District

