

Shapiro, Acting Assistant Administrator for Air and Radiation, September 17, 1993; and "Use of Actual Emissions in Maintenance Demonstrations for Ozone and CO Nonattainment Areas," D. Kent Berry, Acting Director, Air Quality Management Division, November 30, 1993. Our guidance provides that an area may meet this requirement by showing how its ozone precursor emissions changed due to permanent and enforceable emissions reductions from when the area was not monitoring attainment of the 1-hour ozone NAAQS to when it reached attainment. See the rationale set forth in the Cincinnati redesignation (65 FR 37879, 37886–37889, June 19, 2000) and the Pittsburgh redesignation (66 FR 53094, October 19, 2001). The Sixth Circuit has recently upheld EPA's interpretation in *Wall v. EPA* (265 F.3d 426, 435).

In the January 30, 2003, proposed rule at 68 FR 4856–4858, EPA explained the basis for concluding that the observed air quality improvements are due to the implementation of permanent and enforceable emission reductions. The reasons include, analysis of the emission controls which have resulted in emission reductions, an analysis of meteorological conditions showing a trend toward the reduction of ozone concentrations while the number of days conducive to forming ozone showed no significant trend, and an assessment of emissions in 1990 and 2000 which have shown a substantial decrease in emissions of VOCs and NO_x.

Annual days conducive to ozone formation (those days with relatively clear skies, low wind speeds and southerly wind directions, high peak temperatures exceeding 85 degrees Fahrenheit, and little or no precipitation) have shown no noticeable trend up or down, only yearly variations. The number of conducive days have stayed between approximately 20 and 50 days per year with no increasing or decreasing trend. Meanwhile, exceedances have decreased from over 120 in 1978, over 100 in 1983, over 60 in 1988, to a total of 11 in the three-year period of 2000 to 2002. In addition, year-to-year fluctuation of conducive days cannot be correlated with higher or lower exceedance levels over the last few years. Since 1989, as the number of conducive days fluctuated from year to year, the number of exceedances demonstrated no similar trend. This indicates a disassociation between monitored exceedances and meteorological effects.

During the 1990–2000 period, as the area-wide ozone design values in the St.

Louis area were decreasing, the VOC and NO_x emissions in the St. Louis area were also significantly decreasing (see response to comment 20 for further discussion on the area's design values). The following tables list VOC and NO_x emissions in 1990 and 2000 for the Missouri and Illinois portions of the St. Louis ozone nonattainment area. These tables show that the entire nonattainment area experienced a downward trend in VOC and NO_x emissions. This downward trend in emissions and ozone design values, along with no significant trend in the number of days conducive to ozone formation shows that the observed improvements in air quality are due to the implementation of permanent and enforceable emission control measures.

1990 AND 2000 MISSOURI PORTION OF THE ST. LOUIS NONATTAINMENT AREA VOC AND NO_x EMISSIONS

[Emissions in tons per ozone season weekday]

Source category	VOC	NO _x
1990		
Point Sources	81.97	347.61
Area Sources	87.74	29.47
On-Road Mobile Sources	135.42	135.00
Off-Road Mobile Sources	64.30	114.32
1990 Totals	369.43	626.40
2000		
Point Sources	46.59	165.96
Area Sources	57.38	32.27
On-Road Mobile Sources	103.79	181.75
Off-Road Mobile Sources	40.59	73.16
2000 Totals	248.35	453.14

1990 AND 2000 METRO-EAST AREA VOC AND NO_x EMISSIONS

[Emissions in tons per ozone season weekday]

Source category	VOC	NO _x
1990		
Point Sources	74.05	95.85
Area Sources	33.84	1.66
On-Road Mobile Sources	43.27	45.13
Off-Road Mobile Sources	23.49	23.99
1990 Totals	174.65	166.63
2000		
Point Sources	17.91	61.91
Area Sources	28.32	1.18
On-Road Mobile Sources	26.57	54.71
Off-Road Mobile Sources	21.31	23.85
2000 Totals	94.11	141.64

Reductions in ozone precursor (VOC and NO_x) emissions have brought many areas across the country into attainment. EPA has approved many ozone redesignations showing decreases in ozone precursor emissions resulting in attainment of the ozone standard. See redesignations for Pittsburgh (66 FR 53094, October 19, 2001), Cincinnati (65 FR 37879, June 19, 2000), Charleston (59 FR 30326, June 13, 1994; 59 FR 45985, September 6, 1994), Greenbrier County (60 FR 39857, August 4, 1995), Parkersburg (59 FR 29977, June 10, 1994); (59 FR 45978, September 6, 1994), Jacksonville/Duval County (60 FR 41, January 3, 1995), Miami/Southeast Florida (60 FR 10325, February 24, 1995), Tampa (60 FR 62748, December 7, 1995), Lexington (60 FR 47089, September 11, 1995), Owensboro (58 FR 47391, September 9, 1993), Indianapolis (59 FR 35044, July 8, 1994; 59 FR 54391, October 31, 1994), South Bend-Elkhart (59 FR 35044, July 8, 1994; 59 FR 54391, October 31, 1994), Evansville (62 FR 12137, March 14, 1997; 62 FR 64725, December 9, 1997), Canton (61 FR 3319, January 31, 1996), Youngstown-Warren (61 FR 3319, January 31, 1996), Cleveland-Akron-Lorain (60 FR 31433, June 15, 1995; 61 FR 20458, May 7, 1996), Clinton County (60 FR 22337, May 5, 1995; 61 FR 11560, March 21, 1996), Columbus (61 FR 3591, February 1, 1996), Kewaunee County (61 FR 29508, June 11, 1996; 61 FR 43668, August 26, 1996), Walworth County (61 FR 28541, June 5, 1996; 61 FR 43668, August 26, 1996), Point Coupee Parish (61 FR 37833, July 22, 1996; 62 FR 648, January 6, 1997), and Monterey Bay (62 FR 2597, January 7, 1997). Most of the areas that have been redesignated to attainment for the 1-hour ozone standard have continued to attain it. Areas that are not maintaining the 1-hour ozone standard have a maintenance plan to bring them back into attainment.

Between 1990 and 2000, area-wide VOC and NO_x emissions in the St. Louis area decreased by 37 percent and 25 percent, respectively. In Missouri, the VOC and NO_x emissions during this time period decreased by 33 percent and 28 percent, respectively. (See the rulemaking redesignating the Illinois portion of the St. Louis area published in today's **Federal Register** for NO_x and VOC reductions for the Metro-East area.) These emissions reductions were due to the implementation of Missouri's 15 percent rate-of-progress plan, including its implementation of a centralized motor vehicle inspection and maintenance program and stationary source controls. Additional reductions