

believes that any voluntary measures taken by industry and others over a two or three day period in this three year time period does not render the air quality monitoring data unrepresentative of the air quality. As explained in more detail in response to comment 19 below, ozone levels monitored during 2000–2002 are due to permanent and enforceable emission control measures which are in place (e.g. I/M programs, RACT on VOC stationary sources).

In the event that some sources did voluntarily reduce emissions over this two or three day period, EPA has no basis to conclude that these voluntary reductions had a significant effect on the monitored air quality. As the commenter points out, ozone formation occurs through “complex chemistry and meteorology”. Voluntary reductions over a short time period may or may not have had an impact on the monitored air quality. (We note that “voluntary” reductions are always a factor, since total emissions at a given point in time depend, for example, on how many people decide to drive on a given day or weekend). However, the State’s demonstration that air quality improvements are due to permanent and enforceable emission reductions is based on its analysis of emission reductions over a ten-year period (see response to comment 19), consistent with the guidance in the Calcagni Memo at page 4.

Note that in general, EPA encourages voluntary reductions to reduce emissions. EPA supports programs such as the Air Quality Index which encourages people to voluntarily reduce ozone forming activities such as filling gas tanks, painting, mowing, etc. at times when ozone formation is expected to be high. Although these measures are not enforceable nor measurable, they are encouraged. In addition, EPA does not believe that Congress intended, in enacting section 107(d)(3)(E)(iii) of the Act, that communities and states, acting to protect the health of their residents, should be ineligible for redesignation merely because they encourage voluntary ozone precursor emission reductions during periods when ozone concentrations may be high.

Comment 19: EPA cannot demonstrate that permanent and enforceable emission reductions are responsible for any alleged improvement of air quality. The only way to demonstrate this point is through photochemical grid modeling. No such modeling has been presented. Without modeling, EPA’s claim is pure speculation. Emission reductions attributable to the emission controls

“could just as easily lead to increases in ozone concentrations.” The attainment demonstration modeling shows that attainment was “impossible” in 2003.

Response 19: This comment refers to both the Missouri and Illinois portions of the St. Louis area. EPA is here providing a response regarding the Illinois portion of the St. Louis area. See a separate rulemaking in today’s **Federal Register** regarding redesignation of the Missouri portion of the St. Louis area for EPA’s response to this comment as it pertains to the Missouri portion of the St. Louis area.

EPA’s response to this and other comments on the attainment demonstration modeling is included in the response to comments 21 and 24 below. In addition, see *Wall v. EPA* (265 F.3d 426, 435) and our response to comment 23 for further discussion regarding the use of modeling in demonstrating maintenance of the NAAQS.

Neither section 107(d)(3)(E)(iii) of the Act nor the Calcagni Memo referenced by the commenter require modeling as a prerequisite to redesignation of an ozone nonattainment area. Thus, modeling is not a necessary prerequisite for demonstrating that the improvement in air quality is due to permanent and enforceable reductions. See the General Preamble for the Interpretation of Title I of the CAA Amendments of 1990, (57 FR 13496) (April 16, 1992), supplemented at 57 FR 18070 (April 28, 1992); “Procedures for Processing Requests to Redesignate Areas to Attainment,” John Calcagni, Director, Air Quality Management Division, September 4, 1992; “State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992,” Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation, September 17, 1993 (Shapiro Memo); 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 policies provide 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 Court of Appeals for 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 explains the basis for concluding that the observed air quality improvements are due to the implementation of permanent and enforceable emission reductions. The reasons cited include: emission controls which have resulted in emission reductions; an analysis of meteorological conditions which has shown a downward trend in ozone design values while the annual number of days conducive to forming high ozone concentrations showed no significant trend between 1989 and 2002; and an assessment of emissions in 1990 and 2000 which has shown a substantial decrease in emissions of VOC 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 relatively random year-to-year variations. The annual number of ozone conducive days have stayed between approximately 20 and 50, with no consistent increasing or decreasing trend. Meanwhile, annual site-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, showing a significant downward trend and steadily improving peak ozone levels. In addition, the year-to-year fluctuation of annual conducive days cannot be correlated with higher or lower ozone exceedance levels over the last few years. Since 1989, as the annual number of conducive days fluctuated from year-to-year with no significant long term trend, the number of exceedances demonstrated a significant long term downward trend. This indicates a disassociation between monitored exceedances and meteorological effects.

During the 1990–2000 period, as the area-wide worst-case three year ozone design values (see our response to comment 20 for further discussion of the area’s 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 in a downward trend. 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. Both sections of the nonattainment area have experienced a