

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

As can be seen from the above table, both the VOC and the NO_x emissions in the Missouri portion of the St. Louis ozone nonattainment area have been significantly reduced between 1990 and 2000 (VOC emissions have been reduced by 121 tons per day and NO_x emissions have been reduced by 173 tons per day). These emission reductions are primarily due to the implementation of permanent and enforceable emission controls and are primarily responsible for the observed improvement in ozone air quality in the area.

The states have demonstrated that the implementation of permanent and enforceable emission controls have reduced local VOC and NO_x emissions. The states have also demonstrated that year-to-year meteorological changes and trends are not the likely source of the overall, long-term improvement in ozone levels. EPA believes that emission reductions are the cause of the long-term improvement in ozone levels, and are the cause of the area achieving attainment of the ozone standard.

4. Criterion (4): The Area Must Have a Fully Approved Maintenance Plan Meeting the Requirements of Section 175A

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. The maintenance plan is a SIP revision that provides for maintenance of the relevant NAAQS in the area for at least 10 years after redesignation. The Calcagni memorandum dated September 4, 1992, provides additional guidance on the required content of a maintenance plan. An ozone maintenance plan should address the following five areas: the attainment emissions inventory,

maintenance demonstration, monitoring network, verification of continued attainment, and a contingency plan. The attainment emissions inventory identifies the emissions level in the area that is sufficient to attain the 1-hour ozone NAAQS, based on emissions during a three-year period which had no monitored violations. Maintenance is demonstrated by showing that future emissions will not exceed the level established by the attainment inventory. The "attainment inventory" approach to demonstrating maintenance was upheld in *Wall v. EPA*, 426 F. 3d at 435–37. Provisions for continued operation of an appropriate air quality monitoring network are to be included in the maintenance plan. The state must show how it will track and verify the progress of the maintenance plan. Finally, the maintenance plan must include a list of potential contingency measures which ensure prompt correction of any violation of the 1-hour ozone NAAQS.

a. Attainment Emissions Inventory

Both Illinois and Missouri selected 2000 as "the attainment year" for purposes of demonstrating attainment of the 1-hour ozone NAAQS.

The projected 2000 VOC and NO_x emissions for the St. Louis area are summarized in the table above.

b. Maintenance Demonstration

To demonstrate maintenance of the ozone standard through a ten-year maintenance period, both Illinois and Missouri projected VOC and NO_x emissions for the St. Louis area to 2007 and 2014 and compared these projected emissions to the 2000 attainment year emissions. The 2007 emission estimates were generated to test a midpoint in the ten-year maintenance period.

The following tables summarize the VOC and NO_x emission estimates for the St. Louis area for 2000, 2007, and 2014 periods.

ILLINOIS 2000, 2007, AND 2014 METRO-EAST AREA VOC AND NO_x EMISSIONS

[Emissions in tons per ozone season
weekday]

Source category	VOC	NO _x
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
2007		
Point Sources	21.19	54.34
Area Sources	28.07	1.24
On-Road Mobile Sources	16.31	36.87

ILLINOIS 2000, 2007, AND 2014 METRO-EAST AREA VOC AND NO_x EMISSIONS—Continued

[Emissions in tons per ozone season
weekday]

Source category	VOC	NO _x
Off-Road Mobile Sources	16.04	19.07
2007 Totals	81.61	111.52
2014		
Point Sources	24.49	62.13
Area Sources	28.10	1.29
On-Road Mobile Sources	10.13	18.72
Off-Road Mobile Sources	13.26	14.54
2014 Totals	75.98	96.67

MISSOURI 2000, 2007, AND 2014 ST. LOUIS AREA VOC AND NO_x EMIS- SIONS

[Emissions in tons per ozone season
weekday]

Source category	VOC	NO _x
2000		
Point Sources	46.59	165.96
Area Sources	57.38	32.27
On-Road Mobile Sources (MOBILE6-based esti- mates)	103.79	181.75
Off-Road Mobile Sources	40.59	73.16
2000 Totals	248.35	453.14
2007		
Point Sources	47.72	149.5
Area Sources	57.19	34.12
On-Road Mobile Sources	74.46	130.55
Off-Road Mobile Sources	27.91	66.01
2007 Totals	207.28	380.18
2014		
Point Sources	51.73	154.57
Area Sources	59.42	35.58
On-Road Mobile Sources	47.14	68.59
Off-Road Mobile Sources	24.28	58.84
2014 Totals	182.57	317.58

c. Monitoring Network

Missouri and Illinois have addressed the maintenance plan requirements for monitoring and emissions inventories. Both have committed to continue the operation of the monitors in the area in accordance with 40 CFR part 58.

d. Verification of Continued Attainment

Both the states of Illinois and Missouri have the legal authority to implement and enforce the requirements of the ozone maintenance plan. This includes the authority to adopt, implement, and enforce any subsequent emission control contingency measures determined to be necessary to correct future ozone attainment problems.