

Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide NAAQS on or after November 15, 1992" was also used to evaluate Ohio's request. An analysis of these submittals is contained in a Technical Support Document (TSD), dated December 9, 1994, and an addendum to this TSD dated March 7, 1995.

I. Background

The 1977 Act required areas that were designated nonattainment to develop SIPs with sufficient control measures to expeditiously attain and maintain the standard. For Ohio, Lucas and Wood Counties were designated nonattainment for ozone, see 43 FR 8962 (March 3, 1978), 43 FR 45993 (October 5, 1978), and 40 CFR Part 81.

After enactment of the amended Act on November 15, 1990, the nonattainment designation of the Toledo area continued by operation of law according to section 107(d)(1)(C)(i) of the Act; furthermore, it was classified by operation of law as moderate for ozone pursuant to section 181(a)(1) (56 FR 56694, November 6, 1991), codified at 40 CFR 81.336.

More recently, the Toledo area has ambient monitoring data that show no violations of the ozone NAAQS, during the period from 1990 through 1992. The area, therefore, became eligible for redesignation from nonattainment to attainment consistent with the amended Act. On September 17, 1993, Ohio requested redesignation of the area to attainment with respect to the ozone NAAQS. To ensure continued attainment of the ozone standard, Ohio submitted an ozone maintenance SIP for the Toledo area with the redesignation request. On November 1, 1993, Ohio held a public hearing on the maintenance plan and redesignation request.

II. Evaluation Criteria

The 1990 Amendments revised section 107(d)(3)(E) to provide five specific requirements that an area must meet in order to be redesignated from nonattainment to attainment.

1. The area must have attained the applicable NAAQS.
2. The area has met all applicable requirements under section 110 and part D of the Act.
3. The area has a fully approved SIP under section 110(d) of the Act.
4. The air quality improvement must be permanent and enforceable.
5. The area must have a fully approved maintenance plan pursuant to section 175A of the Act.

Each of these requirements are addressed below.

A. Section 107(d)(3)(E)(i). The Administrator determines that the area has attained the National Ambient Air Quality Standard (NAAQS). For ozone, an area is considered in attainment of the NAAQS if there are no violations, as determined in accordance with 40 CFR 50.9, based on quality assured monitoring data for three complete, consecutive calendar years. A violation of the NAAQS occurs when the annual average number of expected exceedances is greater than 1.0 at any site in the area at issue. An exceedance occurs when the maximum hourly ozone concentration exceeds 0.124 ppm. The data should be collected and quality-assured in accordance with 40 CFR Part 58, and recorded in the Aerometric Information Retrieval System (AIRS) in order for it to be available to the public for review. The monitors should have remained at the same location for the duration of the monitoring period required for demonstrating attainment.

Ohio submitted ozone monitoring data recorded in the Lucas and Wood Counties Metropolitan Area (LWCMA) during the years 1984 through August 31, 1993. No violations were monitored for the three-year period 1990 through 1992 upon which the redesignation request was based. Furthermore, no violations have been monitored since then. Monitored exceedances (one-hour averaged) of 0.127 ppm in 1991, 0.126 ppm in 1993, and 0.142 ppm occurred at the Yondota Avenue monitor in 1994. An exceedance of 0.136 ppm occurred at the Friendship Park monitor in 1993. The USEPA used data stored in AIRS to determine the annual average expected exceedances for the years 1990, 1991, 1992, 1993, and 1994. Since the annual average expected exceedances for each monitor during these years is less than 1.0, Lucas and Wood Counties are considered to have attained the standard.

B. Section 107(d)(3)(E)(iii). The Administrator determines that the improvement in air quality is due to permanent and enforceable measures. Ohio estimated emission reductions from a nonattainment year (1988) to an attainment year (1990), and found that emission reductions from federally mandated control on fuel volatility and new automobiles reduced volatile organic compound (VOC) emissions by 25,843 lbs/day. In 1989, fuel volatility was restricted to 10.5 pounds per square inch (psi) in the Toledo area. Currently, the fuel volatility standard is 9.0 psi. This standard was established in 1992. The USEPA considers the emissions reductions from the Federal Motor Vehicle Control Program (FMVCP) and

Federal volatility standards to be permanent and enforceable and to have contributed to the improvement in air quality.

Controls placed on a wastewater ditch which was used to transport wastewater from the British Petroleum (BP) refinery to a wastewater treatment system also provided VOC emissions reductions during this period. This wastewater ditch, which measured about 3600 feet in length and an average of about 10 feet in width, is referred to as the "oily ditch." Prior to 1990, this "oily ditch" was uncontrolled and was one of the largest single sources of VOCs in the LWCMA with emissions of 19,802 lbs/summer day. The USEPA reviewed the methodology used to calculate these emissions and agrees with the amount of emissions estimated from this source. A major portion of the open ditch was converted to a hard pipe to minimize VOC emissions. Ohio estimates that the enclosure of 3000 feet of the "oily ditch" which was completed on March 15, 1990, resulted in an emission reduction of 11,225 lbs/summer day of VOCs. Since the USEPA is approving the Director's Findings and Orders requiring this control into the SIP as part of the maintenance plan, the emission reductions from the enclosure of the "oily ditch" at the BP Toledo Refinery are considered permanent and enforceable and to have contributed to the improvement in air quality.

C. Section 107(d)(3)(E)(iv). 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 which provides for maintenance of the relevant NAAQS in the area for at least 10 years after redesignation. The Calcagni Memorandum provides further guidance on the required content of a maintenance plan.

An ozone maintenance plan should address the following five areas: the attainment inventory, maintenance demonstration, monitoring network, verification of continued attainment and a contingency plan. The attainment emissions inventory identifies the emissions level in the area which is sufficient to attain the ozone NAAQS, and includes emissions during the time period which had no monitored violations. Maintenance is demonstrated by showing that future emissions will not exceed the level established by the attainment inventory. Provisions for continued operation of an appropriate air quality monitoring network are to be