

1999 (inclusive) and at one additional monitor with two-years of data for 1998 and 1999, not the four monitors identified in the comments. For the 2002 ozone season, violations were recorded at seven monitors. One of these seven has only one full ozone season (which was 2002) and recorded two exceedances in 2002 (with the design value being the second highest reading which was 137 ppb). Another one of these seven has data for the last 123 days of the ozone season (July 1, 2003, through October 31, 2003 inclusive). This monitor recorded only one exceedance, but due to the adjustment procedure found in 40 CFR part 50, the number of expected exceedances is increased to 1.7.

The worst monitor for 1999 had an annual average of 4.2 expected exceedances and a design value of 0.132 ppm. By the end of the 2002 ozone season this monitor had an annual average of 1.4 expected exceedances and a design value of 0.128 ppm.

In terms of average number of expected exceedances, one monitor had an annual average of 2.7 expected exceedances based upon the 2002 ozone data. For 2002, this monitor had a design value of 0.126 ppm. At the end of the 1999 this monitor had an annual average of 1.3 expected exceedances and a design value of 0.128 ppm.

Since 1999, for the monitors with more than one season of data, the average number of expected exceedances at the worst monitor has dropped from 4.2 to 2.7 and the design value has dropped from 132 ppb to 128 ppb.

Comment 3: The commenter alleges that EPA's refusal to accept UAM results for the attainment demonstration conflicts with longstanding Agency policy, namely, EPA's policy that which requires the use of the UAM to demonstrate eligibility for granting waivers from the NO_x requirements under section 182(f). The commenter quotes a portion section 2.6.1 of the NO_x Supplement to the General Preamble.¹⁴ Section 2.6.1 says that "EPA has determined that, as a technical matter, photochemical grid modeling is the only reliable tool to justify an area-wide exemption from the NO_x requirements (or relaxation of otherwise required NO_x reductions)." See 57 FR at 55623 (November 30, 1992). The commenter notes that EPA extended a statutory SIP submittal deadline to enable states to complete

crucial UAM modeling. The commenter concludes with an assertion that EPA is being inconsistent by allowing attainment demonstrations to discount UAM results while requiring adherence to UAM before NO_x waivers can be granted to limited groups of sources.

Response 3: EPA disagrees with the comment for several reasons. The comments ignore the overall context in which EPA made this one statement in section 2.6.1, and, specifically, EPA does not agree that the use of the phrase "photochemical grid modeling is the only reliable tool" has the meaning ascribed to it by the commenter when placed in the context of the original guidance and subsequent guidance. The comments also ignore subsequent guidance issued regarding waivers from the NO_x requirements of section 182(f) (NO_x waivers).

In section 2.6.1, of the NO_x Supplement to the General Preamble, EPA stated that EPA has determined that, as a technical matter, photochemical grid modeling is the only reliable tool to justify an area-wide exemption from the NO_x requirements (or relaxation of otherwise required NO_x reductions). We concluded that states must include in such demonstrations photochemical grid modeling analyses that consider various control strategies with and without NO_x reductions. We stated that for a variety of ozone nonattainment areas photochemical grid modeling either has not been utilized previously or, if utilized, has not adequately considered the effects of NO_x emission reductions. We recognized that at that time, while efforts to conduct photochemical grid modeling were underway in many states, the time needed to establish and implement a modeling protocol and to interpret the model results will, in a variety of cases, extend beyond the November 15, 1992 deadline for submission of NO_x rules.

On December 16, 1993, EPA issued "Guideline for Determining the Applicability of Nitrogen Oxides Requirements under Section 182(f)." In that guidance EPA expounded upon the guidance provided in the NO_x Supplement to the General Preamble. For instance, EPA stated it would allow grid models other than UAM to be used for regional scale modeling needed for the net ozone benefits test in transport regions.¹⁵

Under the "net air quality test", EPA stated that the primary test should be

the effect the exemption would have on attainment of the primary NAAQS for the criteria pollutants and that secondary tests, as needed, can extend to the (qualitative or quantitative) consideration of other air quality impacts that are explicitly recognized in the CAA. Under this test, an area would have to make a showing that the area under consideration clearly does not need NO_x reductions to provide for attainment to attain any NAAQS.¹⁶ This should be based on a comparison of the geographic area exposed to concentrations above the ozone NAAQS with and without NO_x reductions from the sources concerned or where UAM results are available, population exposure to concentrations above or near the NAAQS may be used instead of the geographic area exposure factor.

Under the "contribute to attainment test", EPA stated that the demonstration must show that additional NO_x reductions would not contribute to ozone attainment in the area. The guidance was to model: (1) Substantial VOC reductions; (2) substantial NO_x reductions; and (3) both the VOC and NO_x reductions. If the attainment demonstration has not been completed, such substantial VOC reductions need not be a level showing attainment if such reductions are substantial.¹⁷ If the area-wide predicted maximum 1-hour ozone concentration for each day modeled under scenario (1) is less than or equal to that from scenarios (2) and (3) for the same day, then the area would be eligible for an exemption from the section 182(f) requirements.¹⁸

Under the "net ozone air quality benefit test", EPA required a comparison of exposures to ozone concentrations resulting from: (1) Substantial VOC reductions; (2) substantial NO_x reductions; and (3) both the VOC and NO_x reductions. If the attainment demonstration has not been completed, such substantial VOC reductions need not be a level showing attainment if such reductions are substantial.¹⁹ The geographic scope was all portions of the ozone transport region in which impacts from NO_x emissions from the area seeking the exemption can be determined by the photochemical grid model. Under the guidance, if the exposure to ozone concentrations from scenario (1) is less than or equal to the exposure to ozone concentrations from scenarios (2) and (3), then the section 182(f) net ozone

¹⁴ "State Implementation Plans; Nitrogen Oxides Supplement to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," 57 FR 55620, November 30, 1992.

¹⁵ See Guideline for Determining the Applicability of Nitrogen Oxides Requirements under Section 182(f), December 16, 1993, section 7.3.

¹⁶ *Id.*, Chapter 3.

¹⁷ *Id.*, Chapter 8.

¹⁸ *Id.*, Chapter 4.

¹⁹ *Id.*, Chapter 8.