

exceeds the 0.12 ppm standard.¹¹ To account for missing days (monitors may not be operating on some days due to malfunctions, maintenance and calibration, or power outages, etc.) when the monitor is not functioning the procedure in appendix H of 40 CFR part 50 is used to convert the number of actual number measured exceedances for the year to an actual number of expected exceedances.

The form of the ozone NAAQS requires the use of a 3-year period to determine the average number of exceedances per year. In its simplest form, the ozone standard requires that the average number of exceedances over a 3-year period, cannot be greater than 1.0. An area with four exceedances during a 3-year period, therefore, does not meet the ozone standard because four exceedances in 3 years averages out to more than once per year. Because of the form of the ozone NAAQS, data are combined over multiple years but they are not combined from different sites.

The number of expected exceedances for a year is always equal to or greater than the actual number of measured exceedances. The one-hour ozone standard is violated when the annual average number of expected exceedances exceeds 1.0. The standard and the method for converting measured exceedances to expected exceedances is found in 40 CFR 50.9 and appendix H to 40 CFR part 50.

The proper use of the 1999 and 2002 and intervening years of ozone data would be to perform the expected exceedances determination using that data. That the area had "nine exceedance days in 2002" says only that there were nine days in 2002 during which at least one monitor recorded an exceedance. The proper context for the 2002 ozone data would be to compute the average annual number of expected exceedances over the three year period 2000 to 2002.

Therefore, EPA believes that the number of exceedance days is irrelevant when evaluating an attainment demonstration because the number of exceedance days has no bearing on the form of the 1-hour ozone standard. Compliance with the standard is performed on a monitor-by-monitor basis. The peak ozone value for 2002 (or 1999 for that matter) is irrelevant unless placed in context with the remaining data for 2002 as well as the data for 2000 and 2001. A monitor is in full compliance with the standard which

allows up to 3.1 expected exceedances under 40 CFR 50.9 and appendix H to 40 CFR part 50. Under appendix H to 40 CFR part 50, a monitor has to record at least a value equal to or greater than 0.125 ppm in order for the number of expected exceedances to be 1.0 or greater for determining exceedances of the one-hour ozone standard. Whether that monitored value is 0.125 ppm or 0.158 ppm does not matter.

Seven Parts Per Billion (ppb)

Adjustment to Peak Values.

The commenter stated that even if one assumes that the NO_x SIP call will deliver a 7 ppb ozone reduction in the peak ozone values the peak ozone concentration will still be violating the standard.¹² As stated in the preceding paragraphs, compliance with the standard is not determined using the peak value, but whether the standard is exceeded more than an average of 1.0 times per year when averaged over three years. EPA disagrees that the peak monitored data would be the proper determinant of nonattainment using such a method. EPA believes that to use such a method properly the commenter's assumed adjustment of 7 ppb (0.007 ppm) would have to be subtracted from all the monitored data readings to see if a monitor would record more than three exceedances in any three year period.

One threshold issue with such a method is whether one should assume the same number of daily measurements in future years as in the past in order to compute expected number of exceedances. For example, for the new monitor at the Equestrian Center in Prince George's County, Maryland has provided only 123 days of data for 2002. Because the reported data covers the 123 days for the months of July through October, one could reasonably assume the monitor will be operated over the entire ozone season in the future. But such an assumption does not provide any insight into just how much data capture one should assign to the monitor in the future to compute expected number of exceedances using appendix H to 40 CR part 50. Likewise, assumptions have to be made concerning the number of days assumed less than the standard when computing the number of expected exceedances.

Examination of the ozone data for any time period will show a variation in the number of monitored exceedances at

any one monitoring site. For the 1997 to 2002 time period, the only monitors that have recorded exceedances in every year since 1997 are the two in Prince George's County Maryland and both monitors have shown continual improvement since 1997. All other monitors have had years where no exceedances have been recorded and years where one or more have been recorded.

EPA has determined that applying an assumed 7 ppb adjustment to all of the 1997 to 2002 data would yield no monitor, for which complete data is available for the 1997 to 2002 time period, with more than 3 exceedances for the three year period ending in 2002. For those monitors which have data for only one ozone season for the period ending in 2002, EPA notes that the 7 ppb adjustment would result in greater than 1.0 exceedances at the following two monitors: one monitor in Fairfax County, Virginia (monitor ID 510591005-1) and one in Prince George's County, Maryland (monitor ID 240338003-1). However, these monitors have only one year of data. And the monitor in Prince George's County recorded only one exceedance in 2002, but the number of expected exceedances for 2002 is 1.7 after applying the procedures of 40 CFR part 50, appendix H that account for missing days of data.

EPA has determined that applying a 5 ppb adjustment to all of the 1997 to 2002 data would yield only one additional monitor (that in Arlington, Virginia) with more than 3 exceedances for the three year period ending in 2002.

These results are presented in detail in the technical support for this final action.¹³ As noted above, EPA believes that monitoring data for one year is not necessarily a good indicator of future year data. For this reason, EPA believes this one scintilla of contrary evidence (which arises from a method that EPA neither proposed nor endorses) does not outweigh the preponderance of evidence supporting EPA's determination that attainment of the 1-hour ozone NAAQS will be achieved in 2005.

Monitor Trends.

With regard to the 1999 data, EPA has determined that the one-hour ozone NAAQS was violated at six monitors with three full years of data for 1997 to

¹¹ While the rounding may seem to increase the standard by four percent (.005 divided by 0.12), the standard was set to include an ample margin of safety as required by section 109(b) of the CAA.

¹² The commenter submitted the 7 ppb adjustment to claim that "[e]ven if one were to assume a 7 ppb reduction in ambient levels from the NO_x SIP call which is near the middle of the 5-10 ppb reduction attributed to the SIP call in the TSD, the Greenbelt monitor would still be in violation."

¹³ See section IV. "Regarding Comment on Number of Exceedance Days and an Air Quality Adjustment of 7 ppb and Air Quality Trends" to "First Amendment to Technical Support Document for Approval and Promulgation of Air Quality Implementation Plans; District of Columbia, Maryland, and Virginia; Post-1996 Rate-of-Progress Plan for the Metropolitan Washington, DC Nonattainment Area", dated April 10, 2003.