



March 17, 2015

Ms. Gina McCarthy
Administrator
U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mailcode 28221T, Attention Docket ID No. EPA-HQ-OAR-2008-0699
1200 Pennsylvania Ave. NW.
Washington DC 20460

Subject: Comments on EPA's Proposed National Ambient Air Quality Standards for Ozone, Docket ID No. EPA-HQ-OAR-2008-0699

Dear Administrator McCarthy:

The Wisconsin Department of Natural Resources (WDNR) hereby submits the attached comments regarding the U.S. EPA's proposed revision to the National Ambient Air Quality Standards (NAAQS) for ozone, published in the Federal Register on December 17, 2014 (79 FR 75234). WDNR requests that EPA utilize the final rule to address the comments, concerns, and information provided in the attachment.

WDNR has a long history of collaborating with external partners, stakeholders, and the public to improve state air quality and meet EPA's air quality standards. The ozone NAAQS should be set at a level supported by available science. EPA is taking comment on a standard as low as 60 ppb. Due to the significant uncertainty and lack of scientific evidence, EPA should not set the standard at 60 ppb, which approaches background concentrations. In addition, doing so would cause nearly the entire State of Wisconsin to be nonattainment, raising significant concerns about continued growth of our manufacturing-based economy and the ability to achieve such a stringent standard. Even at 65 ppb, half of all counties in Wisconsin could be designated as nonattainment, potentially costing jobs and diminishing business growth. Any increase in the stringency of the standard is certain to have demonstrable economic impacts on Wisconsin.

In addition, Wisconsin's air quality is heavily impacted by ozone precursors originating from out of state, which presents an inequitable challenge to attaining any revised standard. Wisconsin's lakeshore counties, in particular, continue to suffer the consequences of diminished air quality and resulting nonattainment due to emissions originating beyond Wisconsin's borders. EPA's previous efforts to address the effects of transport on these areas have proved inadequate. EPA must continue to work to sensibly resolve transport issues while supporting state recommendations to keep areas from being designated nonattainment when it can be demonstrated that local contributions to monitoring ozone concentrations are insignificant when compared to out-of-state emissions.

Wisconsin continues to expend resources to implement the 1997 and 2008 ozone standards and is also currently implementing, or expecting to implement, numerous other CAA programs including the Mercury and Air Toxics Standards, the 1-hour SO₂ standard, the 2006 and 2012 PM_{2.5} standards, the regional haze program, and the Clean Power Plan. These efforts largely draw upon the same limited state resources. Any increase in the stringency of the ozone NAAQS, therefore, must be accompanied by a concomitant level of resources, both financial and technical.

In addition to the proposed primary and secondary standards, WDNR's comments examine other important aspects of EPA's proposal, such as the proposed extension of the ozone monitoring seasons, changes in air quality monitoring requirements, and the exceptional events process. In particular, WDNR strongly disagrees with EPA's proposed extension of the Wisconsin's ozone season, which is unsupported by data and fails to appreciate the logistical challenges to starting up monitoring sites in mid-winter in the upper Midwest. WDNR is open to having further discussions with EPA on this topic so that the agency can better understand the state's concerns.

Any questions about these comments can be directed Deputy Division Administrator and Acting Air Director Bart Sponseller at Bart.Sponseller@Wisconsin.gov or 608-264-8537. Thank you for the opportunity to comment on this proposed rule.

Sincerely,

A handwritten signature in blue ink that reads "Michael J. Brund".

for Cathy Stepp

Attach. (1)

Attachment
Wisconsin Department of Natural Resources (WDNR) Comments on
EPA's Proposed National Ambient Air Quality Standards for Ozone - March 17, 2015
(Docket ID No. EPA-HQ-OAR-2008-0699)

1. Proposed Decision on the Primary Standard

EPA should use the available science to set a primary ozone standard that protects human health, as required by the Clean Air Act.

EPA has proposed setting the primary ozone standard between 65 and 70 ppb and is taking comment from 60 to 75 ppb. Wisconsin has worked extensively and successfully to reduce ozone concentrations in the state. Given that ozone precursors are already heavily regulated, significant private as well as public resource investments will be needed to comply with any revised primary ozone standard. Consequently, it is critical that any level finalized by EPA should be no more stringent than that shown necessary to protect public health, and, in accordance with the Clean Air Act, should be based on the best available scientific data.

2. Proposed Decision on the Secondary Standard

EPA should set the secondary standard at the same form and level as the primary standard to assist states with implementation.

EPA has proposed to set the secondary ozone standard at the same form and level as the primary standard (65-70 ppb). The secondary standard was established to protect public welfare, including avoiding visible foliar (leaf) injury, protecting forest tree growth, productivity and carbon storage, and avoiding crop yield losses. EPA also is taking comment on setting a distinct secondary standard based on W126 values of 13 to 17 ppm-hrs.

WDNR evaluated state ozone monitoring data from 2011 to 2014 (design value years 2011-13 and 2012-14). The results show that, for these years, there were more monitoring sites that exceeded the proposed primary standard of 65-70 ppb than sites that exceeded a W126 index of 13-17 ppm-hrs; in addition, ozone levels peaked in the same counties using both measures. WDNR therefore believes that setting a distinct secondary ozone standard based on a W126 index value of 13-17 ppm-hrs would not provide additional environmental protection in Wisconsin.

If EPA sets the proposed secondary standard equal to the primary standard, this would be of significant benefit to states. Implementing a single standard would reduce the burden on limited state resources in terms of plan development, data collection and analysis, and meeting certain statutory requirements, such as transportation conformity. Since additional funding to implement federal air quality standards has not been forthcoming, this is an important consideration.

3. Communication of Public Health Information

EPA should adjust the Air Quality Index to reflect any changes in the primary ozone standard.

The Air Quality Index (AQI) should be adjusted to mirror any revised level of the primary ozone standard. The AQI helps protect Wisconsin citizens from exposure to elevated air quality concentrations by providing easily understood metrics that individuals can use to tailor their activities during ozone episode periods.

4. Data Reporting and Data Handling Requirements

EPA should revise the proposed daily maximum 8-hour average ozone concentration calculation so that either more 8-hour periods are included or fewer valid periods of data are required.

WDNR recognizes that EPA's proposal to determine daily maximum 8-hour average ozone concentrations based on 17 consecutive 8-hour periods in each day (beginning with the 8-hour period from 7:00 a.m. to 3:00 p.m. and ending with the 8-hour period from 11:00 p.m. to 7:00 a.m.) is designed to eliminate overlapping daily maximum 8-hour averages that can in effect double-count high ozone values.¹ However, the corresponding proposal to require valid 8-hour averages for 13 of the 17 8-hour periods in a day may create logistical challenges for states. While the idea of an ozone day beginning at 7:00 a.m. makes sense based on ozone formation principles, it also corresponds to the typical work day, creating potentially unnecessary challenges for field operators. On a day on which a routine procedure occurs that requires the monitor to be offline for a period of time (such as for an audit, maintenance, or calibration), the potential for a day to be invalid, because more than four 8-hour periods were invalid, is greater than under the current requirements.

For these reasons, EPA should consider revising the proposed calculation such that either more periods are included or fewer valid periods of data are required.

5. Exceptional Events Information Submission Schedule

EPA should revise its proposed exceptional events timeline to make it less burdensome and more achievable in practice. In addition, EPA should define the exceptional event demonstration process in detail through notice-and-comment rulemaking.

EPA appropriately recognizes that the existing generic deadlines associated with exceptional event flagging and demonstration submission may not work well with the timing of the designation process under a potential revised NAAQS. In this context, WDNR appreciates EPA's attempt to allow agencies more time to address flagging and a corresponding demonstration. However, while the approach proposed by EPA would be more flexible in some situations, it would actually allow less flexibility in others. EPA should therefore reconsider the proposed approach.

One area EPA should revise is the time allowed for flagging and making initial descriptions of exceptional events. EPA's proposed approach allows states additional time to flag and describe dates within the first two years of data used for the three-year design value. However, depending on the month of NAAQS promulgation, year three may be more or less restrictive. For example, if the NAAQS is promulgated in June or July 2016 and state designations will be based on 2014 – 2016 data, any exceptional events must be flagged with initial description by January 1, 2017. This is six months prior to the current deadline and three months prior to the deadline before which data is due to be reviewed and submitted to EPA's Air Quality System (AQS). This is excessively burdensome for agencies. In addition, if data years four or five are required, the timeline could be even more restrictive and time-consuming. EPA should revise this timeline to be less burdensome on states.

Likewise, the exceptional event demonstration timing should be reconsidered to allow states greater flexibility. Under the proposal, event demonstrations would need to be made no later than one year following the NAAQS promulgation for years 1-3 and 19 months after promulgation for years four or five. This compressed timeline is difficult for monitoring agencies due to a lack of resources available for assembling a detailed exceptional event demonstration.

¹ For example, this approach would avoid the situation in which one day had a high daily maximum 8-hour average ozone concentration value based on hours 11:00 p.m. to 7:00 a.m. (on the next day), and the next day had a high value based on hours 12:00 a.m. to 8:00 a.m.. In this case, 7 of the 8 hourly data points in the two day's measurements are duplicative, so these high concentrations in effect count twice against the site since they count towards two days' value.

Finally, the exceptional event demonstration process is largely undefined and unnecessarily resource intensive. Based on prior experience, EPA's demonstration requirements are extremely time consuming, analysis intensive and burdensome. Regional offices are given too much discretion in determining when a demonstration is complete, often resulting in multiple submittals over an unnecessarily long amount of time, as well as inconsistencies between states in different regions. WDNR has commented several times on the critical need for a well-defined and streamlined exceptional event process that is not overly burdensome for monitoring agencies. The proposal indicates that "The EPA expects to propose additional revisions to the Exceptional Events Rule in a future notice..." but provides no timeline for completing this work. EPA should revise the exceptional events demonstration process through a rule, creating a well-defined, streamlined process that leaves little to no discretion to individual regional offices, so that agencies understand exactly what is required of them in order to make a demonstration that will be accepted. This rulemaking process should be completed prior to the time when a monitoring agency may need to utilize the procedures to address ozone exceptional events associated with any revised ozone NAAQS.

6. Revisions to the Length of the Required Ozone Monitoring Seasons

WDNR strongly disagrees with EPA's proposed monitoring season change for Wisconsin, as it is neither supported by data nor logistically feasible given current funding. EPA should retain the current ozone season (April 15 to October 15). EPA should also not make any change in Wisconsin's ozone monitoring season effective for the 2016 ozone season.

EPA is proposing to extend the length of the required ozone monitoring season in numerous states. For Wisconsin, EPA is proposing an extension of a month and a half, from the current required monitoring ozone season of April 15 to October 15 to an extended season of March 1 to October 15. WDNR strongly disagrees with this proposal. Not only would this change be very burdensome to the state, WDNR's analysis of the data shows that it would provide little or no additional public health protection.

WDNR examined twenty years of ozone monitoring data (1995-2014) from all monitors that reported observations before the beginning of Wisconsin's current ozone season (April 15). This analysis included almost 3000 daily observations in March and a similar number in the first half of April. As shown in Table 1, over this 20 year period, only two maximum daily 8-hour average ozone observations exceeding EPA's proposed level of the primary standard (i.e., greater than 65 ppb) were recorded in March: one in 1996 and the other in 1999. No monitors reported observations exceeding 70 ppb in March. In contrast, 25 observations (or 0.8% of observations) in early April exceeded 65 ppb, and 9 observations (or 0.3% of observations) exceeded 70 ppb.

By going back twenty years, this analysis is extremely conservative. Ozone concentrations were much higher in the 1990s than they are today due to much higher emissions and concentrations of ozone precursors, so it is probable that the meteorological conditions that correspond to these "high" ozone concentrations in the 1990s would result in much lower ozone concentrations today. Accordingly, this analysis of ozone concentrations does not provide support for extending the ozone monitoring season in Wisconsin into March.

Table 1. Ozone maximum daily 8-hour average observations above potential revised NAAQS levels (1995-2014), based on all measurements available.*

Date Range	>60 ppb [†]	>65 ppb	>70 ppb	Total Observations
March 1-15	7 (4 in 2010, 3 in '95 & 96)	1 (1996)	0	1129
March 16-31	15 (8 in 2010-13, 7 in '97, '99, '05)	1 (1999)	0	1759
April 1-14	65 (many years)	25 (14 in 2010, 11 in '05, '03, '96, '99)	9 (2 in 2010, 7 in '05, '03, '99, '96)	2963

*The numbers listed are for 8-hour average observations at monitors, not unique days with “exceedances”. There may have been more than one “exceedance” observation on a given day.

[†] If considering observations ≥ 60 ppb, these numbers increase to 10, 20 and 76.

In contrast to WDNR’s analysis, EPA’s analysis in support of the extended ozone season used a threshold of 60 ppb and examined values greater than or equal to this value. EPA’s analysis did not distinguish a 65 ppb or 70 ppb threshold. The 60 ppb threshold is much lower than the proposed NAAQS level of 65-70 ppb, so the finding that concentrations exceeded 60 ppb does not indicate that observations would have exceeded the new standard. This is especially true if EPA sets the NAAQS to 70 ppb, a full 10 ppb higher than the threshold EPA used.

In addition, EPA’s analysis was conducted using just four years of data. During this time period, there were roughly 900 observations in Wisconsin in March and 1200 in early April.² WDNR’s analysis, however, included more than triple this number of observations and did not find any days in March with ozone concentrations above the proposed standard level in the last fifteen years.

In addition, March 2010 was unlike any other March in this 20-year record in northern Wisconsin, Minnesota and the Upper Peninsula of Michigan, with conditions extraordinarily conducive to ozone formation. Table 1 shows the disproportionate influence of this unusual year on the number of “exceedances” during this time period; over half of the March “exceedances” of 60 ppb were recorded in 2010. EPA’s inclusion of such an unusual year as one of only four years in their analysis gives too much weight to the extraordinary concentrations observed in 2010, while our 20-year analysis helps put this year in better context. It would be more appropriate for EPA to evaluate longer records of monitored concentrations to look for observations that actually exceeded the proposed standard rather than basing their decision on “exceedances” of a level lower than the proposed NAAQS level over a shorter (4-year) record.

In addition to the lack of any demonstrable public health benefit to EPA’s proposed extended season, starting the ozone season on March 1 in Wisconsin is fiscally and logistically infeasible. WDNR strongly disagrees with EPA’s national estimate that the proposed ozone season extensions would only cost \$230,000 annually. WDNR estimates the impact to its network at least \$130,000 per year, based on a very low annual cost operations estimate of \$20,000 per ozone site at the current seasonal length and the need to extend monitoring at 26 sites around the state. Based on the low total cost estimate used, an additional one and a half months of operation results in an additional \$5000 per site, per year ($\$5,000 * 26 = \$130,000$). This figure is based solely on current operating costs and does not take into account other needs and costs associated with trying to start-up ozone season operations in the winter.

² Note that this excludes observations at EPA’s CASTNET site at Perkinstown (Taylor County) for 2010 and 2011 because these data are not available on EPA’s AirData website.

In addition to these direct costs, EPA's proposal fails to reflect the very real challenges of starting up many of the state's monitoring sites during typical upper-Midwest winters. February is still deep winter in Wisconsin, with mean temperatures ranging from 14° F to 24° F with temperatures frequently dipping below zero degrees and extensive snow cover.³ Some monitoring sites in Wisconsin were not located to be accessible year-round and would need significant extra work and effort to get into in February – if they can be physically accessed at all.

For example, the Newport State Park site is located in a very remote portion of the park with off-road access. In March 2014, when preparing the site for the start of the ozone season on April 15, this site was surrounded by three feet of snow and had to be accessed by tractor and snowplowed out in order to be reached. These conditions are not out of the ordinary for February, when field staff would be out preparing sites to meet EPA's proposed March 1 start date. This type of access is costly and creates additional health and safety concerns for field operators because of the use of heavy equipment, which DNR does not currently own, and cold weather conditions. Additional funding would ease this challenge, but would not address the health and safety of field staff.

EPA's proposed ozone season extension would also dramatically shorten the 'slower' season for operators of seasonal sites. The time outside of ozone season is spent on many other critical supporting tasks, including preventive maintenance, updates to documentation, and acceptance testing of new equipment. It is difficult to estimate what this may translate to in terms of dollars, but the expansion of the ozone season would result in a dramatic loss of this critical time and would need to be accounted for in future budgets.

In summary, based on both the data and weather concerns, a March 1 start date to the ozone monitoring season is not supported under any scenario. Wisconsin recommends no revision to the length of the monitoring season, which is consistent with the comments submitted in response to the 2008 ozone NAAQS proposal. If EPA extends the season in any way, EPA must increase the federal grant dollars provided to support the ozone network in Wisconsin to reflect the additional work and equipment needed to support such an extension.

Finally, EPA should not make any change in Wisconsin's ozone monitoring season effective for the 2016 ozone season, since there is insufficient time and funding to adequately prepare for such a change. In addition, EPA's proposed rule will not be final until Wisconsin is well into the public process supporting its annual network plan, so implementation of an ozone season change in 2016 would happen without public notice and comment, contrary to federal network plan requirements.

7. Revisions to the Photochemical Assessment Monitoring Stations (PAMS)

EPA should ensure the goals of the PAMS network are met through this proposal and give further thought to whether such a resource-intensive network design accomplishes those goals.

In its proposal, EPA addresses PAMS and enhanced ozone monitoring stations. This treatment is long overdue, and WDNR appreciates the effort to update the PAMS program to address photochemical monitoring needs across the country. As the proposal notes, CASAC's Air Monitoring and Methods Subcommittee found the existing PAMS network design to be outdated and too resource intensive. The proposal addresses network design, though it is not clear if the network design accomplishes appropriate goals. The proposal does little to identify what the needs of the program truly are, what the data to date has shown, and how the new requirements would provide for a more appropriate network.

It is unclear in EPA's proposal if the objectives of the PAMS network were thoroughly evaluated and how the network should change based on modeling needs. The proposal for the new PAMS network is fairly similar to

³ Mean temperature data is given for 1971-2000 as reported by the Wisconsin State Climatology Office (<http://www.aos.wisc.edu/~sco/clim-history/state/graphics/WI-TFEB2.gif>).

the requirements of the current network, which may not be appropriate. The data from this network is not shared widely, so it is difficult to determine if the data has been utilized and to what extent. It is also difficult to understand if such a resource-intensive network is really necessary to achieve the goals of the PAMS program.

WDNR recommends a variety of reconsiderations in the PAMS proposal. The reconsiderations relate to the choices of location, equipment, training, and resources.

The proposal recommends requiring PAMS at NCore sites in ozone nonattainment areas. The NCore site in Wisconsin is located in Horicon, near the central part of Wisconsin, and is one of only 17 rural NCore sites in the country. While PAMS data from Horicon may support national modeling needs, it may not provide information that supports Wisconsin's needs with respect to understanding ozone formation. Wisconsin's most significant ozone problems occur along the Lake Michigan shoreline due to transport along the lake from Chicago and other areas to the south. Given its inland location, monitoring at Horicon cannot provide insight into these important lakeshore ozone processes.

WDNR appreciates the recognition in the proposal that the NCore site may not be the most appropriate site and that the agency could work with the regional office to determine a more appropriate location. The proposal does not outline what this process might look like and the amount of work that might go into satisfying the regional office. This process should be defined to ensure an agency will not have to exhaust excessive resources to make this demonstration. While the current proposal does allow for a national fixed site program and a flexible program at regional office discretion, WDNR expects that the fixed site portion would require large amounts of funding that might render the flexible portion of the program moot and infeasible. WDNR is therefore concerned that given the requirements for the fixed site program, the resources may not be available to locate a monitor where the state would most benefit from it, e.g., along the lakeshore and in a more urbanized location.

The proposal also assumes that all NCore sites have the necessary space to host all the equipment necessary for a PAMS site. This is an incorrect assumption, and it is likely that many agencies will require additional resources to improve the infrastructure of their NCore site enough to accommodate such equipment. For example, Wisconsin's NCore site consists of 2 separate trailers. Both are full at this point and would require significant work to house an AutoGC system and all of the other support equipment (gas test standards, gas generators, computer system) that would need to be housed in the shelter. While WDNR's NCore site may not end up being a candidate for PAMS, the lack of space at the Horicon trailer illustrates that NCore space is not guaranteed.

In addition, the equipment needs for PAMS, as proposed, are particularly resource intensive and may not offer enough return on investment. It is understood from past PAMS presentations and the current proposal that EPA is currently engaged in an AutoGC evaluation to recommend equipment to agencies. The systems being evaluated vary greatly in cost from moderately expensive to very expensive. WDNR recommends that EPA provide funding for a system at least equal to the system that is forwarded as a result of the ongoing evaluation. Additionally, it is generally noted that in most areas in the country, the most important ozone precursors are NO_x emissions from mobile sources. The extensive VOC profiles provided by AutoGCs are not needed for this type of validation, which could be done with fewer resources. WDNR is also concerned that there are additional measurements, such as that for benzene, that are costly, and it is unclear if the additional data will provide a good return on the amount of funding spent to collect that data.

In the proposal, EPA assumes that NCore operators will have the skills necessary to operate an AutoGC. This may be true at some locations, but should not be assumed. Gas chromatographic (GC) systems require significantly more skill and training to operate and maintain than do the continuous analyzers typically used at NCore sites. Knowledge and experience with chromatographic theory is critical to proper operation of a field deployed AutoGC. This can be gained through training, but a very new AutoGC operator would require extensive training, which many agencies may not have the resources to provide. If an expensive and difficult-to-operate AutoGC is indicated by EPA, funding for training must be provided, and EPA must also ensure the

availability of multiple training opportunities to allow operators to attend in a location that is convenient and approvable by their agency.

Additionally, if a true NO₂ measurement is desired at the PAMS sites, the photolytic oxide of nitrogen analyzer recommended by EPA may not be the best choice and is certainly not the only choice. The Federal Equivalent Method NO₂ by Cavity Attenuated Phase Shift (CAPS) may be a better choice. The photolytic nitrogen oxide analyzer has a less than 100% rate of conversion and also has a very expensive photolytic lamp component with a limited life span.

A variety of meteorological measurement equipment is required as part of the PAMS network. WDNR appreciates that EPA chose not to require upper air wind speed and direction as required meteorological parameters to be monitored at PAMS sites. These upper air measurements can be costly to acquire, so the move to make them recommended rather than required is helpful to monitoring agencies.

EPA proposes extending the PAMS season beyond the June-August timeframe. Though this is just a recommendation, it may be strongly encouraged by certain regional offices and for particular locations. Operation of this costly network beyond the current season must be funded by EPA. WDNR would opt not to operate outside of the current 3-month time period without additional funding. In addition to the direct costs of operating the equipment, additional operation of equipment generates data that must be quality assured, which also must be funded.

Finally, WDNR also recommends that EPA detail the requirements of the Enhanced Monitoring Plans for ozone nonattainment areas in future implementation guidance. Since the ozone NAAQS may be more stringent than the current standard as a result of this proposal, significantly more ozone nonattainment areas may be required to develop Enhanced Monitoring Plans. Additional monitoring will require more equipment, more infrastructure, and greater resources, all of which necessitate greater levels of federal funding for monitoring agencies. If EPA intends to require more ozone monitoring as a result of this proposal, they must provide additional federal funding to achieve these goals.

8. Implementation of the Proposed Ozone Standards

EPA guidance on implementing the proposed ozone standards must occur more quickly than has historically been the case in order to support efficient and effective attainment planning by the states. In addition, EPA needs to continue to engage the states on transport issues and ensure that areas in Wisconsin are not unduly penalized for emissions originating from out of state.

It is imperative that EPA finalize implementation requirements for any updated standard as quickly as possible so that states are fully informed of the key attainment planning needs and can meet their statutory obligations in a timely matter. EPA just this month finalized the implementation rule for the 2008 NAAQS - seven years after the original standard promulgation and almost three years after designations. An implementation rule for a 2015 ozone NAAQS is not likely to diverge significantly in approach and scope from the just finalized rule, so EPA should be able to finalize an implementation rule for the new standard *concurrently* with final designations (e.g., fall of 2017), at the very latest.

EPA must also address the need for an equitable federal policy to address regional transport of ozone and ozone precursors (NO_x and VOCs). The need for such policy will become even more important under a more stringent ozone standard. If needed, EPA should facilitate the development of multi-state efforts addressing the transport of emissions from federally regulated sectors. As is the case with many states, regional transport of ozone precursors is expected to increasingly dominate attainment planning in Wisconsin.

9. Prevention of Significant Deterioration (PSD) Programs

EPA should grandfather certain PSD permit applications as proposed and do so through notice-and-comment rulemaking.

WDNR supports EPA’s proposal to grandfather certain PSD permit applications during the ozone standard transition period because it avoids the significant burden of resubmitting these applications simply due to the change in the ozone NAAQS. WDNR concurs on the need for EPA to formalize this provision through notice-and-comment rulemaking.

10. Form of the Ozone Standard

EPA should consider using a period longer than three years to determine design values for the proposed ozone standards.

EPA should continue using an 8-hour ozone average concentration metric for ozone, measured in parts-per-billion (ppb), as well as use the 4th high concentration for each ozone season as the metric for inter-year comparison. However, WDNR suggests that EPA consider using a longer averaging period when determining annual design values; for example, using a five-year period instead of the current three-year period. The benefit of a longer design value period would be to make the standard more stable year-to-year, producing not only more stable and consistent designation of nonattainment areas, but also ensuring that areas subsequently redesignated to attainment will be in a stronger position to maintain attainment.

Figures 1-3 portray the impact of four or five year design value averaging periods compared to the current three-year period and to the annual 4th high for three Wisconsin sites along the Lake Michigan shoreline. These three sites represent the greater Chicago (IL/IN/WI) area, Milwaukee metropolitan area and the Sheboygan County area, respectively. Utilizing a longer design value averaging period could have ensured an area like Sheboygan County would have been able to demonstrate and maintain clean data with respect to the 1997 ozone NAAQS, thereby supporting approvals of its redesignation and maintenance plans.

Figure 1. Impact of Different Design Value Averaging Periods – Kenosha/Greater Chicago

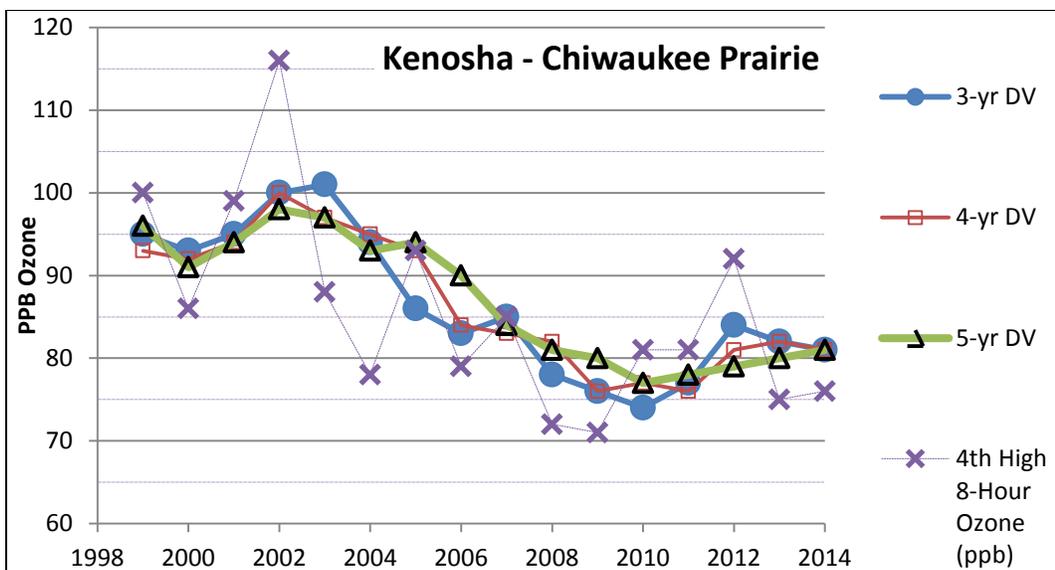


Figure 2. Impact of Different Design Value Averaging Periods – Milwaukee

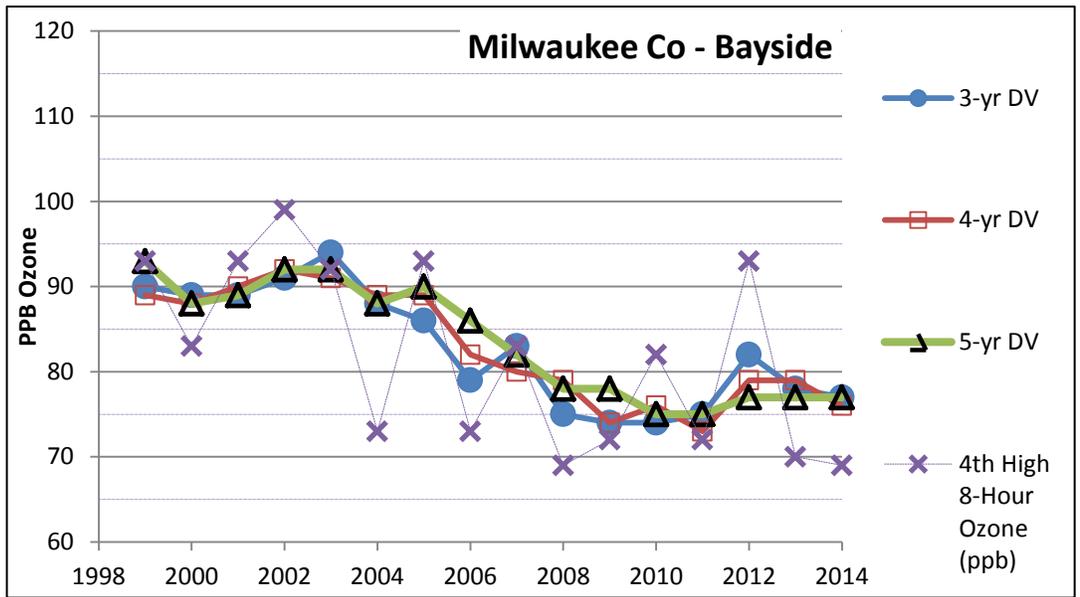


Figure 3. Impact of Different Design Value Averaging Periods – Sheboygan

