

**Oral Statement to Clean Air Scientific Advisory Committee on the
Policy Assessment for the Review of the Ozone National Ambient Air Quality
Standards, External Review Draft**

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Hello, I am Courtney Taylor, an Atmospheric Scientist at Ramboll Corporation. My comments today pertain to the 2019 Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards, External Review Draft – Review of the Secondary Standard (Chapter 4). More detailed comments will also be submitted in writing to EPA.

I have over 15 years of experience in the air quality field. Over the past 15 years, I've supported state and local municipalities with ozone nonattainment areas by conducting ozone modeling for State Implementation Plans. I also have conducted air quality impact analyses, including ozone impacts relative to the primary NAAQS and the W126 index, to support National Environmental Policy Act requirements. I've published journal articles, presented findings at conferences and workshops, and greatly enjoy furthering the public's understanding of atmospheric chemistry.

To enhance the clarity of the Policy Assessment, I recommend that EPA emphasize its findings in Appendix 4D that all monitoring sites with ozone concentrations below the current secondary standard also have a W126 index at or below 17 ppm-hours. The data and analysis presented in Figure 4-7 effectively support EPA staff's preliminary conclusions regarding the level of protection of public welfare provided by the current standard and should be discussed in more detail. Further, I appreciate EPA's analysis of single-year deviations of the W126 index from three-year averages, as well as its more focused review of ozone effects as part of multi-year studies to better understand the impacts of the single-year W126 index compared to a three-year average.

While it is important to emphasize, as EPA's analysis does, that the current secondary NAAQS is protective based on historical W126 values, EPA might supplement that analysis by quantifying the probability that a W126 index value exceeds 17 ppm-hr could occur at ambient ozone concentrations below the current level of the secondary NAAQS. This analysis would provide additional support for the statement made on page 4-86 that "the currently available information, including such infrequent single-year deviations of this magnitude above the average, could reasonably be judged not to pose meaningful risks of public welfare impacts to Class I areas." The data for such an analysis are readily available from the quantile-quantile plots in Appendix 4D. This analysis could be helpful in support of the proposed rule.

Furthermore, I also recommend that EPA include more discussion concerning what is known about the impact of ozone in ambient air on Crassulacean Acid Metabolism (CAM) plants. Assessment of CAM plants is particularly relevant to consider because their mechanisms for carbon fixation are very different from C3 and C4 plants and likely affect the plants' responses to ozone. Further CAM plants are native to regions of the US with high W126 values and many Class I areas. CAM plants could be relatively insensitive to both peak ozone concentrations and the W126 index because they keep their stoma closed during the day when ozone concentrations peak and open their stoma at night when ozone concentrations are typically low. Accordingly, the W126 index, which is calculated based on ozone concentrations during daylight hours, is not a metric that is appropriate for addressing ozone effects on CAM plants. While it is noted that EPA has preliminarily concluded that the form of the primary NAAQS is

sufficiently protective for the secondary standard, I recommend that EPA bolster this position with further assessment of CAM plants. In particular, if the W126 index is not an appropriate measure for addressing impacts on CAM plants, it is reasonable for EPA to determine that the W126 index is therefore not appropriate for a secondary standard.

I plan to submit written comments to EPA as part of the public review window for the Policy Assessment in order to expand on the above points. Thank you for your time today and for considering my recommendations.