

Questions for Non-Member Consultants on the Ozone PA from Dr. Corey Masuca

1) 2.1. Ozone and Photochemical Oxidants in the Atmosphere

How sound science is this mechanism of ozone transfer between the stratosphere and the troposphere?

2) 2.3.1 Ambient Air Monitoring Requirements and Monitoring Networks

While a number of types of sites are mentioned in this section such as PAMS, NCore, CASTNET, National Park Service (NPS), and Special Purpose Monitors (SPMs), what about Near Road Monitoring Sites, especially for NO_y?

3) 2.3.2 Data Handling Conventions and Comparisons for Determining Whether Standards Are Met

There is a reference to the hourly concentrations being utilized to compute 8-hour averages. Is this short-term 8-hour rolling average consistent with short-term actual and scientific studies?

4) 2.4.3 Diurnal Patterns

While this section refers diurnal patterns of relative ozone concentrations between day and night, are these diurnal patterns solely (although mostly are) attributable to temperature? What about stagnant weather conditions? What about the effects on topography/geography in determining diurnal patterns?

5) Background Ozone

There, in general appears to be a lot of discussion about background ozone concentrations from transport and natural sources. However, are most salient ozone concentrations more localized and from anthropogenic sources?

This section references the utilization of photochemical grid models due to the lack of ability to characterize the origins of ozone and the ability to estimate the magnitude of background ozone. However, how predictable are these photochemical models, especially given the highly photolytic and relative instability of ozone in the atmosphere?

This section mentions that international emissions sources via transport mostly originate from anthropogenic sources. However, is there a possibility that there can be international transports from non-anthropogenic/biogenic sources?

Also, this section noticeably leaves out non-international, interstate transport of ozone.

6) 2.5.1.6 Pre-Industrial Methane

There is a whole section devoted to long-lasting atmospheric methane. However, what is the importance of methane with respect to the formation of and consideration of ozone? Is a discussion on methane warranted?