

How Low is Low Enough for the Ozone Standard?

Roger O. McClellan
Advisor, Toxicology and Human Health Risk Analysis
13701 Quaking Aspen Place N.E.
Albuquerque, NM 87111-7168
Tel: 505-296-7083
E-mail: roger.o.mcclellan@att.net

Prepared for
March 28, 2008 Teleconference
USEPA Clean Air Scientific Advisory Committee Ozone Panel

Good afternoon, I am Roger O. McClellan, an independent consultant on inhalation toxicology and risk analysis issues. The comments I offer today are based on my previous service as Chair of the Clean Air Scientific Advisory Committee (CASAC) and service on numerous CASAC Panels dealing with ozone and other criteria air pollutants.

This afternoon I would like to comment on the role of science and judgment in the “Final Rule for the National Ambient Air Quality Standard for Ozone” announced by EPA Administrator Stephen Johnson. This Final Rule revises the 1997 Standard and concludes a process begun in September 2000. As required by a Court Decree, the EPA published a Proposed Rule on July 11, 2007 and requested public comments on anticipated action in issuing a Final Rule for the ozone standard. Numerous comments were submitted to the official ozone docket. I personally submitted comments¹ to the ozone docket and also joined with 9 of my scientific colleagues in submitting a document² – “Critical Considerations in Evaluating Scientific Evidence of Health Effects of Ambient Ozone” to the docket. Since release of the Proposed Rule, there has been continued debate over the Final Rule that was just issued. That discussion continues even today as evidenced by this meeting.

Much of the discussion has focused on the science that informs the policy judgments that must be made in setting the NAAQS for ozone. The discussion has included repeated reference to the CASAC Ozone Panel recommendation that the primary standard be set within a specific narrow numerical range, i.e. 0.060 – 0.070 ppm. In my opinion, the CASAC Ozone Panel moved from the Science arena into the Policy arena in advocating an upper bright line value of 0.070 ppm for the primary standard. That value represents the personal judgment of the Ozone Panel Members, not just their interpretation of the Science.

The EPA Administrator, under the authority of the Clean Air Act, has the exclusive responsibility and authority for making policy judgments, informed by science, in setting the ozone standard. Supreme Court Justice Stephen Breyer, in the landmark case, *Whitman versus American Trucking Association* (531 U.S. 457, 2001), offered “common sense” guidance for setting the standards for criteria pollutants such as ozone. He noted that while the Administrator cannot consider cost in setting air quality standards for the criteria pollutants, the EPA Administrator need not set standards at zero

risk. He advised the Administrator to use judgment in a "comparative health" context when "deciding what risks are acceptable in the world in which we live."

In short, Justice Breyer recognized that every day life carries with it a variety of risks. Justice Breyer's opinion provides "common sense" guidance for deciding how low is low enough in setting air quality standards – the acceptable risk level and associated numerical level of the standard are policy judgments that should be informed by science. In my opinion, the Administrator could have made a policy judgment, informed by science, with selection of a numerical value for the ozone primary standard as high as the 1997 primary standard of 0.08 ppm. His selection of a lower value was consistent with the original advice of his own staff – 0.075 ppm up to a level slightly below the current standard. The CASAC Ozone Panel, in proposing a bright line upper limit of 0.070 ppm, offered their collective judgment on – "what risks are acceptable in the world in which we live." That is their policy choice, it should not be postured as being exclusively science based. Science alone can never provide a basis for deciding how low is low enough, policy judgments are always required in deciding "what risks are acceptable." Any specific numerical value for the Standard has an associated "acceptable risk value," even if the level of acceptable risk has not been explicitly stated.

The CASAC Ozone Panel's draft letter dated March 26, 2008 continues to suggest that somehow science and scientists alone can establish the appropriate level of the NAAQS for ozone. If the CASAC Ozone Panel decides to submit a letter to the Administrator on the Final Ozone Rule, I suggest they clarify the distinction between science and judgment in offering their opinion on the level of the ozone standard. I urge the CASAC Ozone Panel to acknowledge that the numerical level they have advocated reflects their personal policy preferences. Likewise, in arguing for "further lowering the national ambient ozone standards," I urge the CASAC Ozone Panel to acknowledge that this is a collective wish that goes well beyond considering just the available scientific information. How low is low enough for the ozone standard is ultimately a policy judgment informed by scientific information and analysis.

References

1. McClellan, R. O. Comments on National Ambient Air Quality Standards for Ozone: Proposed Rule, Federal Register, Vol. 72, No. 132/Wednesday, July 11, 2007, pp 37818-37919, Docket ID No. EPA-HQ-OAR-2005-0172, submitted October 9, 2007.
2. Brauer, M., Frampton, M.W., Koutrakis, P., McClellan, R.O., McDonnell, W.F., Moolgavkar, S., North, D. W., Smith, A.E., Smith, R.L., Utell, M.J. Critical Considerations in Evaluating Scientific Evidence of Health Effects of Ambient Ozone. Comments on National Ambient Air Quality Standards for Ozone: Proposed Rule, Federal Register, Vol. 72, No. 132/Wednesday, July 11, 2007, pp 37818-37919, Docket ID No. EPA-HQ-OAR-2005-0172, submitted October 9, 2007.