

December 18, 2002

**FINAL RESPONSE TO COURT REMAND
OF NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE
TO ADDRESS “BENEFICIAL” ASPECTS OF GROUND-LEVEL OZONE**

TODAY’S ACTION

- C The Environmental Protection Agency (EPA) is issuing its final response to the U.S. Court of Appeals for the D.C. Circuit’s remand of the 8-hour ozone standard. The May 1999 remand required EPA to consider the potential beneficial effects of ground-level ozone pollution in shielding the public from potentially harmful solar radiation.
- C EPA’s response reaffirms the 8-hour ozone standard, which the Agency issued in 1997. The Agency decided to reaffirm the standard after carefully considering the scientific and technical information available when the 1997 standard was issued, in addition to public comments on the November 2001 proposed response to the remand.
- C In the review directed by the Court, EPA considered the net adverse effects of ground-level ozone pollution. The Agency took into account both the direct adverse inhalation-related effects that were the basis for the 1997 ozone standard, as well as the potential indirect beneficial effects associated with shielding the public from naturally occurring UV-B radiation from the sun.
- C As a result of this review, EPA has concluded that:
 - < the information available on potentially beneficial effects of ground-level ozone is too uncertain to allow credible estimates of such effects;
 - < any beneficial effects would likely be very small from a public health perspective; and
 - < the available information, including information submitted in the public comments, does not warrant relaxing the 8-hour ozone standard set in 1997.
- C This action becomes effective 60 days following publication of this notice in the Federal Register.

NEXT REVIEW OF THE OZONE STANDARD

- C EPA recognizes that information on indirect potentially beneficial health effects of ground-level ozone is now available that was not part of the original rulemaking record.
- C EPA’s Office of Research and Development initiated the next periodic review of the ozone national ambient air quality standards with a “call for information,” published in the Federal Register Sept. 26, 2000.

- C To ensure that the next review of the ozone standards is based on an up-to-date body of relevant scientific information, EPA encourages the public to submit new scientific information on the relationships between ground-level ozone, UV-B radiation, human exposures and related effects on public health.

BACKGROUND

- C In 1997 EPA revised the national ambient air quality standards for ground-level ozone, setting new standards at 0.08 parts per million averaged over an 8-hour time frame.
- C The health-based standard was issued to protect public health with an adequate margin of safety from the wide range of adverse effects directly caused by breathing ozone in the ambient air including:
- < decreased lung function (primarily in children active outdoors);
 - < increased respiratory symptoms (particularly in highly sensitive individuals);
 - < increased hospital admissions and emergency room visits for respiratory causes (among children and adults with pre-existing respiratory disease such as asthma);
 - < inflammation of the lungs; and
 - < possible long-term damage to the lungs.
- C In setting the revised ozone standard in 1997, EPA considered a large body of information about ozone's adverse health effects. This information included both quantitative assessments of adverse effects caused by short-term inhalation exposures, as well as qualitative evidence suggestive of serious chronic adverse effects associated with long-term exposures.
- C On May 14, 1999, The U.S. Court of Appeals for the D.C. Circuit blocked EPA's authority to implement the new 8-hour standards. The Court remanded the 8-hour ozone standards to EPA, instructing the Agency to consider several factors, including whether ground-level ozone pollution provides protection against the sun's harmful ultraviolet rays.
- C EPA appealed other aspects of the decision to the Supreme Court but did not appeal the issue of the potential beneficial effects of ground-level ozone.
- C On Feb. 27, 2001, the U.S. Supreme Court unanimously upheld the constitutionality of the Clean Air Act as EPA had interpreted it in setting health-protective air quality standards. The Supreme Court also reaffirmed EPA's long-standing interpretation that it must set these standards based solely on public health considerations without consideration of costs.
- C On November 14, 2001, EPA proposed a response to the remand on potential beneficial effects. In developing its proposed response, EPA considered the "net" adverse effects of ground-level ozone, taking into account both the direct adverse inhalation-related health effects, as well as the potential for indirect beneficial health effects associated with the shielding of UV-

B radiation.

C In weighing the net adverse effects, EPA considered information on potential indirect beneficial effects of ground-level ozone in much the same way the Agency considered information on ozone's chronic adverse health effects when setting the standards in 1997.

< In its 1997 decision, EPA determined that the information on chronic adverse health effects was too uncertain to serve as the basis for establishing a *more restrictive* standard.

C Similarly, EPA concludes in this final response that the information on potential indirect beneficial effects is too uncertain and not well enough understood to serve as the basis for establishing a *less restrictive* standard. This conclusion is consistent with the response the Agency proposed in November 2001.

FOR MORE INFORMATION

- To download the final response from EPA's web site, go to the following address:
<http://www.epa.gov/ttn/naaqs>.
- For additional information, contact Susan Stone of EPA's Office of Air Quality Planning and Standards at (919) 541-1146.