

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 50

[FRL-7428-7]

RIN 2060-ZA11

### National Ambient Air Quality Standards for Ozone: Final Response to Remand

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final response to remand.

**SUMMARY:** On July 18, 1997, in accordance with sections 108 and 109 of the Clean Air Act (Act), EPA completed its review of the national ambient air quality standards (NAAQS) for ozone (O<sub>3</sub>) by promulgating revised primary and secondary standards (62 FR 38856; henceforth, "1997 final rule"). On May 14, 1999, the United States Court of Appeals for the District of Columbia Circuit ("D.C. Circuit") remanded the O<sub>3</sub> NAAQS to EPA to consider, among other things, any potential beneficial health effects of O<sub>3</sub> pollution in shielding the public from the "harmful effects of the sun's ultraviolet rays." 175 F.3d 1027 (D.C. Cir., 1999). Today's action provides EPA's final response to that aspect of the Court's remand. Based on its review of the air quality criteria and NAAQS for O<sub>3</sub> completed in 1997, its additional assessment of potential beneficial effects of tropospheric O<sub>3</sub>, and taking into account public comments, EPA has determined that information linking (a) changes in patterns of ground-level O<sub>3</sub> concentrations likely to occur as a result of programs implemented to attain the 1997 O<sub>3</sub> NAAQS to (b) changes in relevant patterns of exposures to ultraviolet (UV-B) radiation of concern to public health is too uncertain at this time to warrant any relaxation in the level of public health protection previously determined to be requisite to protect against demonstrated direct adverse respiratory effects of exposure to O<sub>3</sub> in the ambient air. Further, it is the Agency's view that associated changes in UV-B radiation exposures of concern, using plausible but highly uncertain assumptions about likely changes in patterns of ground-level ozone concentrations, would likely be very small from a public health perspective. As a result, the revised O<sub>3</sub> NAAQS will remain set at a level of 0.08 parts per million (ppm), with a form based on the 3-year average of the annual fourth-highest daily maximum 8-hour average O<sub>3</sub> concentrations measured at each monitor within an

area. No other issues related to the 1997 O<sub>3</sub> NAAQS remain before the Court, and other remanded issues related to implementation of the O<sub>3</sub> NAAQS are not addressed by today's action.

**EFFECTIVE DATE:** March 7, 2003.

**ADDRESSES:** A docket containing information relating to EPA's review of the O<sub>3</sub> primary and secondary standards and this response to the D.C. Circuit remand (Docket No. A-95-58) is available for public inspection at the EPA's Air Docket Center, 1301 Constitution Avenue, N.W., Room B108, Washington, DC 20460, Mail code 6102T. This docket incorporates the docket from the previous review of the O<sub>3</sub> standards (Docket No. A-92-17) and the docket established for the ozone air quality criteria document (Docket No. ECAO-CD-92-0786). The docket may be inspected between 8:30 a.m. and 4:30 p.m. on weekdays, excluding legal holidays. A reasonable fee may be charged for copying. The information in the docket constitutes the complete basis for the decision announced in this final response to the remand. For the availability of related information, see **SUPPLEMENTARY INFORMATION**.

**FOR FURTHER INFORMATION CONTACT:** Susan Lyon Stone, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency (C539-01), Research Triangle Park, NC 27711; e-mail [stone.susan@epa.gov](mailto:stone.susan@epa.gov); telephone (919) 541-1146.

#### SUPPLEMENTARY INFORMATION:

##### Availability of Related Information

Certain documents are available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. Available documents include:

(1) The Review of the National Ambient Air Quality Standards for Ozone: Assessment of Scientific and Technical Information ("Staff Paper") (EPA-452/R-96-007, June 1996, NTIS # PB-96-203435; \$67.00 paper copy and \$21.50 microfiche). (Add a \$3.00 handling charge per order).

(2) Air Quality Criteria for Ozone and Other Photochemical Oxidants ("Criteria Document") (three volumes, EPA/600/P-93-004aF through EPA/600/P-93-004cF, July 1996, NTIS # PB-96-185574; \$169.50 paper copy and \$58.00 microfiche).

A limited number of copies of other documents generated in connection with the review of the standard, such as documents pertaining to human exposure and health risk assessments and the relationships between ground-level O<sub>3</sub>, UV-B radiation, and health effects, can be obtained from: U.S.

Environmental Protection Agency Library (C267-01), Research Triangle Park, NC 27711; telephone (919) 541-2777. These and other related documents are also available for inspection and copying in the EPA docket.

#### Electronic Availability

The Staff Paper and documents pertaining to human health risk and exposure assessments are available on the Office of Air and Radiation, Policy and Guidance Web site at: <http://www.epa.gov/ttn/oarpg/t1sp.html>. The O<sub>3</sub> NAAQS 1996 proposal and 1997 final rule are available at the same Web site, at: <http://www.epa.gov/ttn/oarpg/t1pfr.html>.

#### Children's Environmental Health

This final response to the Court's remand, reaffirming the 1997 8-hour O<sub>3</sub> NAAQS, specifically takes into account children as the group most at risk to the direct inhalation-related effects of O<sub>3</sub> exposure, and was based on studies of effects on children's health (U.S. EPA, 1996a; U.S. EPA, 1996b) and assessments of children's exposure and risk (Johnson, 1994; Johnson *et al.*, 1996 a,b; Whitfield *et al.*, 1996; Richmond, 1997). The 8-hour O<sub>3</sub> primary standard protects children's health with an adequate margin of safety from the direct adverse effects associated with inhalation exposures to ground-level O<sub>3</sub>, after considering potential indirect beneficial effects of ground-level O<sub>3</sub> related to its attenuation of UV-B radiation and any associated adverse health effects.

#### Implementation Activities

When the 8-hour primary and secondary O<sub>3</sub> standards are implemented by the States, the power generation, automobile, petroleum, and chemical industries are likely to be affected, as well as other manufacturing concerns that emit volatile organic compounds (VOC) or nitrogen oxides (NO<sub>x</sub>). The extent of such effects will depend on implementation policies and control strategies adopted by States to assure attainment and maintenance of the standards.

The EPA is now developing appropriate policies and control strategies to assist States in the implementation of the 8-hour primary and secondary O<sub>3</sub> NAAQS. The EPA now expects to propose an implementation strategy for public comment early in 2003.

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The following topics are discussed in today's preamble: