FACT SHEET
FINAL DECISION
OZONE NATIONAL AMBIENT AIR QUALITY STANDARDS

SUMMARY OF ACTION

- On December 23, 2020, the U.S. Environmental Protection Agency (EPA) acted to retain, without revision the primary and secondary ozone National Ambient Air Quality Standards (NAAQS). The standards, established in 2015 by the Obama-Biden Administration, are set at 70 parts per billion (ppb), in terms of a 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentrations.

- With this action, EPA is following the principles established in the earliest days of the Trump Administration to streamline the NAAQS review process and to fulfill the statutory responsibility to complete the NAAQS review within five-years.

- The decision to retain the existing ozone standards comes after careful review and consideration of the most recent available scientific evidence and technical information, consultation with the agency’s independent science advisors, and consideration of more than 50,000 public comments on the proposal.

- The Clean Air Act directs EPA to set primary standards to provide public health protection including for at-risk groups with an adequate margin of safety and the secondary standards to provide protection against adverse effects to the public welfare, including the environment and property.

- The existing primary standard (health-based) provides particular protection for children and others with asthma. Ozone in outdoor air increases their risk of asthma attacks while playing, exercising or engaging in strenuous work activities outdoors.

- The current scientific information supports the conclusion that the primary standard established in 2015 protects public health with an adequate margin of safety, including the health of at-risk populations.
  - The health effects evidence currently available continues to support the conclusion that ozone can cause difficulty breathing and other respiratory system effects. For people with asthma, these effects can lead to emergency room visits and hospital admissions. Exposure over the long term may lead to the development of asthma. People most at risk from breathing air containing ozone include people with asthma, children, the elderly, and outdoor workers.
  - Information newly available in this review includes evidence of metabolic effects that comes primarily from animal toxicological studies. However, the currently available evidence continues to show respiratory effects associated with the lowest exposures. The decision includes the conclusion that by focusing on protecting populations at risk of respiratory effects, the existing standard also provides protection from metabolic effects.

- The existing secondary (welfare-based) standard provides protection against an array of effects, including effects of ozone exposure on vegetation.
The current welfare effects evidence continues to demonstrate that repeated exposure to ozone damages leaves, reduces growth of vegetation and has other harmful effects on plants and trees that have the potential to impact ecosystems and the benefits they provide. Ozone distributed globally also has effects on climate.

Information newly available in this review supports and expands our understanding on these and other effects on vegetation, ecosystems, and climate.

EPA’s independent science advisors, the Clean Air Scientific Advisory Committee (CASAC) advised the Administrator on several aspects of this review, including the standards.

With regard to the primary standard, the CASAC agreed that the currently available evidence was generally similar to that available in the last review when the standard was set. Based on this conclusion, part of CASAC concluded that the primary standard should be retained. Another part of CASAC expressed support for a lower standard.

With regard to the secondary standard, the CASAC agreed that the current evidence supported retaining the current standard without revision.

In reaching its decision on the secondary standard, the EPA has also considered issues raised by the U.S. Court of Appeals for the D.C. Circuit Court in its remand of the 2015 secondary standard.

The decisions on both standards have also taken into consideration public comment.

This action is effective upon publication in the Federal Register.

Since the beginning of the Trump Administration, EPA has re-designated to attainment eight nonattainment areas for the 2008 8-hour ozone standards. In this same timeframe, U.S. nitrogen oxide emissions have dropped ten percent and volatile organic compound emissions have dropped three percent. National average ozone concentrations have gone down four percent. Since 1990, national average ozone concentrations have dropped 25 percent.

BACKGROUND

The Clean Air Act requires EPA to set national ambient air quality standards for “criteria pollutants.” Currently, ozone and related photochemical oxidants, and five other major pollutants are listed as criteria pollutants. The others are carbon monoxide, lead, nitrogen oxides, particulate matter and sulfur oxides. The law also requires EPA to periodically review, at least every five years, the relevant scientific information and the standards and revise them, if appropriate, to ensure that the standards provide the requisite protection for public health and welfare.

FOR MORE INFORMATION

To download a copy of the final decision, go to EPA’s Web site at:


Today’s decision and other background information are also available either electronically at http://www.regulations.gov, EPA’s electronic public docket and comment system.
• For further technical information about the rule, please contact Deirdre Murphy, with EPA's Office of Air Quality Planning and Standards, at (919) 541-0729 or murphy.deirdre@epa.gov.