

EPA is setting a new ozone air quality standard to protect public health

Background information

In 2008, the U.S. Environmental Protection Agency (EPA) strengthened the federal air quality standard for ozone. EPA set an 8-hour standard of 0.075 parts per million (ppm). Even though this was the most stringent ozone standard ever set by EPA, it fell short of the public health recommendations made by EPA's panel of scientific advisors, the Clean Air Scientific Advisory Committee.

In 2009, EPA announced it would reconsider the 2008 standard to ensure it had a good scientific basis and would protect public health. On January 6, 2010, EPA proposed to strengthen the federal 8-hour ozone standard to make it better protect public health. EPA proposes to set the standard within the range of 0.060 to 0.070 ppm.

EPA committed to making a decision on the ozone standard by July 29, 2011.

What's next

Designating areas

EPA can make one of three designations for an area of the state:

- attainment (meets the standard),
- nonattainment (doesn't meet the standard), or
- unclassifiable (not enough information).

After EPA revises the ozone standard, the Washington Department of Ecology (Ecology) can make recommendations to EPA on designations for every area of the state.

ABOUT OZONE

There are two kinds of ozone. "Good" ozone forms naturally about 10 to 30 miles above the Earth's surface. It helps protect life on Earth from the sun's harmful rays. The ozone at ground level is considered "bad." It is the main ingredient of smog, and can cause health problems.

Ground-level ozone is a gas created by a chemical reaction between oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) in the presence of sunlight. Vehicle and industrial emissions, gasoline vapors, chemical solvents, and natural sources emit NO_x and VOCs that help form ground-level ozone. Many urban areas tend to have high levels of ozone. But high ozone levels can also be found in rural areas, because wind carries ozone and ozone-forming pollutants away from their sources.

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Special accommodations:

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- Ecology must recommend designations and nonattainment boundaries to EPA within EPA's timeframe.
- Any recommendation for a nonattainment area designation must include recommended boundaries for the area. In recommending boundaries, Ecology must consider several factors set by EPA. The boundaries must include both the area violating the standard, and the areas where contributing air pollution sources are located.
- EPA will evaluate Ecology's recommendations and make final designations. Both Ecology's recommendations and EPA's designations are based on monitored ozone concentrations.

Required actions and timeline

EPA committed to provide more information to states, including:

- what states must do to reduce air pollution, and
- when nonattainment areas must comply with the standard (reach attainment).

Ecology must submit plans to EPA showing how Washington will reduce ozone pollution to meet the standard. These plans must be submitted within EPA's timeframe.

Public involvement

Ecology will provide a public comment period and hold a public hearing on proposed designations before submitting recommendations to EPA.

Health concerns

Unhealthy ozone levels are especially harmful to children, older adults, people with lung disease, and people who are active. Breathing ozone can:

- worsen asthma;
- inflame lung tissue;
- permanently scar lung tissue after repeated exposures;
- trigger airway irritation, coughing, and pain when taking a deep breath;
- lower resistance to respiratory illnesses like pneumonia and bronchitis; and
- cause wheezing and breathing difficulties during exercise or outdoor activities.

For more information

To get email updates about this issue, subscribe to Ecology's "Ozone Nonattainment Designation Process" listserv at <http://www.ecy.wa.gov/maillist.html>.