

**FACT SHEET**  
**NATIONAL AMBIENT AIR QUALITY**  
**STANDARDS FOR CARBON MONOXIDE – PROPOSED RULE**

**ACTION**

- On January 28, 2011, EPA proposed to retain the existing National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO). After careful review of the available health science, EPA concludes that the current standards provide the required level of public health protection, including protection for people with heart disease, who are especially susceptible to health problems associated with exposure to CO in ambient air.
- Carbon monoxide is a colorless, odorless gas emitted from combustion processes. Nationally and, particularly in urban areas, the majority of CO emissions to ambient air come from mobile sources. CO can cause harmful health effects by reducing oxygen delivery to the body's organs (like the heart and brain) and tissues. At extremely high levels, CO can cause death.
- Exposure to CO can reduce the oxygen-carrying capacity of the blood. People with several types of heart disease already have a reduced capacity for pumping oxygenated blood to the heart, which can cause them to experience myocardial ischemia (reduced oxygen to the heart), often accompanied by chest pain (angina), when exercising or under increased stress. For these people, short-term CO exposure further affects their body's already compromised ability to respond to the increased oxygen demands of exercise or exertion.
- The existing primary standards are 9 parts per million (ppm) measured over 8 hours, and 35 ppm measured over 1 hour.
- EPA is proposing changes to the ambient air monitoring requirements for CO. The proposed requirements are expected to result in approximately 77 CO monitors operating near highly trafficked roads within 53 urban areas as part of the overall CO monitoring network.
- EPA will accept comments for 60 days after the proposed rule is published in the Federal Register. If, by February 18, 2011, EPA receives a request for a public hearing on this proposed rule, we will hold one on February 28, 2011. EPA must issue a final rule by August 12, 2011.
- There is no secondary (welfare-based) NAAQS for CO due to a lack of evidence of direct effects on public welfare at ambient concentrations. EPA is proposing that the current evidence does not provide support for establishing secondary CO standards.

## **PROPOSED CHANGES TO THE CARBON MONOXIDE MONITORING NETWORK**

- EPA is proposing to revise minimum requirements for CO monitoring by requiring CO monitors to be sited near highly trafficked roads in certain urban areas.
- EPA is proposing to require co-location of these CO monitors with a subset of nitrogen dioxide (NO<sub>2</sub>), monitors that are required, as part of the January, 2010 revision to the NAAQS for NO<sub>2</sub>. Specifically, EPA is proposing to require the co-location with “near-road” NO<sub>2</sub> monitors in urban areas having populations of 1 million or more. EPA estimates that the proposed requirement to include CO monitors at these near-road stations would result in the operation of approximately 77 CO monitors within 53 urban areas, as part of the overall CO monitoring network.
- EPA is proposing that the required CO monitors would be operating by January 1, 2013.
- Nationally, approximately 345 CO monitors were in operation during 2009. EPA expects that in most cases states would not need to purchase new monitoring equipment; rather they could move some of their existing CO monitors to the near-road monitoring stations.
- EPA is also proposing that EPA Regional Administrators would have the authority to require additional monitoring in case-by-case circumstances, such as in areas impacted by major stationary CO sources, in urban downtown areas or urban street canyons, or in areas adversely impacted by meteorological and/or topographical influences.

## **IMPLEMENTING THE CARBON MONOXIDE STANDARDS**

- EPA is proposing to retain the current implementation strategy for the CO NAAQS. Existing guidance, regulations, and policies related to the current CO NAAQS continue to be appropriate to assist states and emission sources to implement the requirements for attaining and maintaining the standards.
- If, after reviewing public comment on this proposal, EPA revises the CO standards, the Agency will separately address the need for revisions to the existing implementation requirements.

## **BACKGROUND**

- The Clean Air Act requires EPA to set national ambient air quality standards for “criteria pollutants.” Currently, carbon monoxide and five other major pollutants are criteria pollutants. The others are ozone, lead, sulfur oxides, nitrogen oxides, and

particulate matter. The law also requires EPA every five years to review the standards periodically and revise them if appropriate to ensure that they provide the requisite amount of health and environmental protection and to update those standards as necessary.

- Currently, there are no areas designated as nonattainment for the CO standards. EPA redesignated the last CO nonattainment area to attainment on September 27, 2010 (See 75 FR 59090).
- EPA first set NAAQS for CO in 1971. For protection of both public health and welfare, EPA set a 8-hour primary standard at 9 ppm and a 1-hour primary standard at 35 ppm. In a review of the standards completed in 1985, EPA revoked the secondary standards (for public welfare) due to a lack of evidence of adverse effects on public welfare at or near ambient concentrations.
- The last review of the CO NAAQS was completed in 1994 and the Agency chose not to revise the standards at that time.
- Under a judicial court order, EPA must complete this review of the CO NAAQS by August 12, 2011.
- EPA's proposed actions are consistent with the advice and recommendations of EPA's principal independent science advisors on National Ambient Air Quality Standards: the Clean Air Act Scientific Advisory Committee.

### **HOW TO COMMENT**

- EPA will accept comment on the proposal for 60 days after publication in the Federal Register. Comments, identified by Docket ID number EPA-HQ-OAR-2008-0015, may be submitted by one of the following methods:
  - [www.regulations.gov](http://www.regulations.gov): follow the on-line instructions for submitting comments.
  - E-mail: Comments may be sent by electronic mail (e-mail) to [a-and-r-Docket@epa.gov](mailto:a-and-r-Docket@epa.gov), Attention Docket ID No. EPA-HQ-OAR-2008-0015.
  - Fax: Fax your comments to: 202-566-1741, Attention Docket ID. No. EPA-HQ-OAR-2008-0015.
  - Mail: Send your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mail Code: 6102T, 1200 Pennsylvania Ave., NW, Washington, DC, 20460, Attention Docket ID No. EPA-HQ-OAR-2008-0015.
  - Hand Delivery or Courier: Deliver your comments to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, D.C. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information

## **FOR MORE INFORMATION**

- To download a copy of the final rules, go to EPA's Web site at:  
<http://www.epa.gov/air/carbonmonoxide>
  
- Today's proposed rule and other background information are also available either electronically at <http://www.regulations.gov>, EPA's electronic public docket and comment system, or in hardcopy at the EPA Docket Center's Public Reading Room.
  - The Public Reading Room is located in the EPA Headquarters, Room Number 3334 in the EPA West Building, located at 1301 Constitution Avenue, NW, Washington, DC. Hours of operation are 8:30 a.m. to 4:30 p.m. eastern standard time, Monday through Friday, excluding Federal holidays.
  - Visitors are required to show photographic identification, pass through a metal detector, and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.
  
- Materials for this proposed action can be accessed using Docket ID No. EPA-HQ-OAR-2008-0015.