



Newsroom

News Releases from Headquarters

EPA Proposes Smog Standards to Safeguard Americans from Air Pollution

Release Date: 11/26/2014

Contact Information: Enesta Jones, Jones.enesta@epa.gov, 202-564-7873, 202-564-4355; En español: Lina Younes, younes.lina@epa.gov, 202-564-9924, 202-564-4355

WASHINGTON— Based on extensive recent scientific evidence about the harmful effects of ground-level ozone, or smog, EPA is proposing to strengthen air quality standards to within a range of 65 to 70 parts per billion (ppb) to better protect Americans' health and the environment, while taking comment on a level as low as 60 ppb. The Clean Air Act requires EPA to review the standards every five years by following a set of open, transparent steps and considering the advice of a panel of independent experts. EPA last updated these standards in 2008, setting them at 75 ppb.

"Bringing ozone pollution standards in line with the latest science will clean up our air, improve access to crucial air quality information, and protect those most at-risk. It empowers the American people with updated air quality information to protect our loved ones - because whether we work or play outdoors - we deserve to know the air we breathe is safe," said EPA Administrator Gina McCarthy. "Fulfilling the promise of the Clean Air Act has always been EPA's responsibility. Our health protections have endured because they're engineered to evolve, so that's why we're using the latest science to update air quality standards - to fulfill the law's promise, and defend each and every person's right to clean air."

EPA scientists examined numerous scientific studies in its most recent review of the ozone standards, including more than 1,000 new studies published since the last update. Studies indicate that exposure to ozone at levels below 75 ppb -- the level of the current standard -- can pose serious threats to public health, harm the respiratory system, cause or aggravate asthma and other lung diseases, and is linked to premature death from respiratory and cardiovascular causes. Ground-level ozone forms in the atmosphere when emissions of nitrogen oxides and volatile organic compounds "cook" in the sun from sources like cars, trucks, buses, industries, power plants and certain fumes from fuels, solvents and paints. People most at risk from breathing air containing ozone include people with asthma, children, older adults, and those who are active or work outside. Stronger ozone standards will also provide an added measure of protection for low income and minority families who are more likely to suffer from asthma or to live in communities that are overburdened by pollution. Nationally, 1 in 10 children has been diagnosed with asthma.

According to EPA's analysis, strengthening the standard to a range of 65 to 70 ppb will provide significantly better protection for children, preventing from 320,000 to 960,000 asthma attacks and from 330,000 to 1 million missed school days. Strengthening the standard to a range of 70 to 65 ppb would better protect both children and adults by preventing more than 710 to 4,300 premature deaths; 1,400 to 4,300 asthma-related emergency room visits; and 65,000 to 180,000 missed workdays.

EPA estimates that the benefits of meeting the proposed standards will significantly outweigh the costs. If the standards are finalized, every dollar we invest to meet them will return up to three dollars in health benefits. These large health benefits will be gained from avoiding asthma attacks, heart attacks, missed school days and premature deaths, among other health effects valued at \$6.4 to \$13 billion annually in 2025 for a standard of 70 ppb, and \$19 to \$38 billion annually in 2025 for a standard of 65 ppb. Annual costs are estimated at \$3.9 billion in 2025 for a standard of 70 ppb, and \$15 billion for a standard at 65 ppb.

A combination of recently finalized or proposed air pollution rules - including "Tier 3" clean vehicle and fuels standards - will significantly cut smog-forming emissions from industry and transportation, helping states meet the proposed standards. EPA's analysis of federal programs that reduce air pollution from fuels, vehicles and engines of all sizes, power plants and other industries shows that the vast majority of U.S. counties with monitors would meet the more protective standards by 2025 just with the rules and programs now in place or underway. Local communities, states, and the federal government have made substantial progress in reducing ground-level ozone. Nationally, from 1980 to 2013, average ozone levels have fallen 33 percent. EPA projects that this progress will continue.

The Clean Air Act provides states with time to meet the standards. Depending on the severity of their ozone problem, areas would have between 2020 and 2037 to meet the standards. To ensure that people are alerted when ozone reaches unhealthy levels, EPA is proposing to extend the ozone monitoring season for 33 states. This is particularly important for at-risk groups, including children and people with asthma because it will provide information so families can take steps to protect their health on smoggy days.

The agency is also proposing to strengthen the "secondary" ozone standard to a level within 65 to 70 ppb to protect plants, trees and ecosystems from damaging levels of ground-level ozone. New studies add to the evidence showing that repeated exposure to ozone stunts the growth of trees, damages plants, and reduces crop yield. The proposed level corresponds to levels of seasonal ozone exposure scientists have determined would be more protective.

EPA will seek public comment on the proposal for 90 days following publication in the Federal Register, and the agency plans to hold three public hearings. EPA will issue final ozone standards by October 1, 2015.

[Search this collection of releases](#) | or [search all news releases](#)

[Get news releases by email](#)

[View selected historical press releases from 1970 to 1999 in the EPA History website.](#)

Recent additions

- 12/18/2014 [Two Texas Companies and Four Chinese Manufacturers Found to Be in Violation of Clean Air Act for Selling More than 11,000 Uncertified Motorcycles and ATVs/ EPA has also denied applications for certificates to these companies for sale of model year 2015 vehicles in the US](#)
- 12/18/2014 [EPA Announces 2014 Annual Environmental Enforcement Results](#)
- 12/17/2014 [EPA Prevents Harmful Chemicals from Entering the Marketplace](#)
- 12/16/2014 [Federal Agencies Support Virginia's Innovative Market-based Approach to Improving Water Quality in Chesapeake Bay](#)
- 12/16/2014 [TODAY: EPA, USDA and White House to Highlight New Market-Based Water Quality Trading Program in Virginia](#)

To view the proposal: <http://www.epa.gov/glo/>

Last updated on: Friday, December 19, 2014

<http://yosemite.epa.gov/opa/admpress.nsf/bd4379a92ceceac8525735900400c27/6ce92be958c8149285257d9c0049562e!OpenDocument>



Fact Sheet – EPA’s Ozone Standard Proposal and How it Could Affect Central Texas

On November 26, 2014, the U.S. Environmental Protection Agency (EPA) proposed new, more stringent, National Ambient Air Quality Standards (NAAQS) for ground-level ozone. Once these standards are finalized in late 2015, several counties in Central Texas face the possibility of being designated “nonattainment” for these new standards. This fact sheet is designed as a resource to local governments, businesses, media, and non-profit organizations in the region, as well as the general public, to better understand this proposal and how it may affect the region. If you have any questions about this fact sheet or other issues related to regional air quality, contact CAPCOG’s Air Quality Program Manager Andrew Hoekzema at (512) 916-6043 or ahoekzema@capcog.org.

What’s in the EPA Proposal?

- The primary standard to protect human health was proposed in a range of 65-70 ppb, down from the current standard of 75 ppb;
 - Primary standard is based on daily peak 8-hour ozone average;
 - Calculated by averaging the fourth highest daily peak 8-hour average across 3 years; and
 - Likely to be set at 65 or 70 ppb, since those are the levels at which specific health data exist.
- The secondary standard to protect public welfare, including effects on vegetation, to be set identical to the primary standard.

For more details on EPA’s proposal, go to:

<http://www.epa.gov/air/ozonepollution/actions.html#nov2014>

Ozone Levels in Central Texas

Dependent on expected growth, typical weather conditions, and existing controls, the following modeled levels should be expected in the MSA.

- For the primary standard (65-70 ppb):
 - 2014 design value = 69 ppb;
 - Projected 2016 design value = 67 ppb;
 - Projected 2017 design value = 65 ppb;
 - Projected 2020 design value (deadline for Marginal areas) = 63 ppb;
 - Projected 2023 design value (deadline for Moderate areas) = 62 ppb;
 - Projected 2026 design value (deadline for Serious areas) = 61 ppb;
- For the secondary standard (13-17 ppm-hours):
 - 2014 design value = 8 ppm-hours.

Fact Sheet – EPA’s Ozone Standard Proposal and How it Could Affects Central Texas

Nonattainment Designations

- Under the Clean Air Act (CAA), within 2 years of finalizing a new or revised standard, EPA is required to designate an area as nonattainment that does not meet a NAAQS or contributes to air quality in an area that does not meet that standard.
 - Nonattainment designations will likely be based on 2014-2016 ozone data.
 - States will be required to submit nonattainment designation recommendations by early October 2016 (1 year after the ozone NAAQS are finalized).
 - In Texas, the TCEQ typically first makes a recommendation to the Governor’s office then the Governor makes a recommendation to EPA.
 - After it receives recommendations, EPA proposes a list of nonattainment areas based on state recommendations and its own analysis. This proposal is required by the end of May 2017.
 - Designations are required to be finalized by early October, 2017.
- EPA is allowed to extend the nonattainment designation deadline by up to 1 year (3 years after a standard is finalized) if it determines it has insufficient information to promulgate designations;
 - If EPA exercised this option, nonattainment designations would occur by October 1, 2018, rather than 2017.
 - Under this scenario, 2015-2017 ozone data could be used for nonattainment designations.
 - New Tier 3 vehicle and fuel standards, which will significantly reduce emissions from on-road sources, should significantly lower emissions in 2017.
 - By the end of 2017, the Austin-Round Rock MSA’s ozone levels may be low enough to be in attainment of a 65 ppb standard and avoid a nonattainment designation.
- Redesignation to attainment:
 - An area remains designated nonattainment until it comes into compliance with the NAAQS and the EPA approves a “maintenance plan” for the area.

Potential Nonattainment Area Boundaries

- If either of the two regulatory ozone monitors operated by TCEQ in Travis County are measuring above the standard when nonattainment designations occur, Bastrop, Caldwell, Hays, Travis, and Williamson Counties – which make up the Austin-Round Rock MSA, as defined in 2013 – would be the default boundaries of a nonattainment area.
- EPA also considers the following nine factors in deciding whether to add or remove counties from the default boundaries of the nonattainment area:
 - Air quality data;
 - Emissions data (location of sources and contribution to ozone concentrations);
 - Population density and degree of urbanization (including commercial development);
 - Traffic and commuting patterns;
 - Growth rates and patterns;
 - Meteorology (weather/transport patterns);
 - Geography/topography (mountain ranges or other air basin boundaries);
 - Jurisdictional boundaries (e.g., counties, air districts, existing nonattainment areas, Reservations, metropolitan planning organizations (MPOs)); and
 - Level of control of emissions sources.

Fact Sheet—EPA's Ozone Standard Proposal and How it Could Affects Central Texas

Background v. Locally-Generated Ozone

- International transport and naturally-occurring levels account for about 20 ppb.
- Areas outside of Texas account for another 20 ppb.
- Other parts of Texas account for another 20 ppb.
- Austin-Round Rock MSA emissions account for about 10-15 ppb.

Local NO_x and VOC emissions:

- Ozone forms through reactions between NO_x and VOC emissions.
- Local NO_x emissions: about 100 tons per day.
- Local VOC emissions: about 140 tons per day.
- On-road mobile sources (cars, buses, trucks) account for 53% of NO_x and 23% of VOC emissions;
- Non-road mobile sources (construction equipment, farm equipment, trains, airplanes) account for 20% of NO_x and 11% of VOC emissions.
- Point (large stationary) sources account for 17% of NO_x and 2% of VOC emissions.
- Area (small stationary) sources account for 9% of NO_x and 64% of VOC emissions.
- Local NO_x emission reductions have 40-70 times the impact on peak ozone levels per ton compared to local VOC emission reductions.
- 1 ton per day of NO_x emission reductions translates into about a 0.07-0.08 ppb reduction in ozone (1 ppb ozone = 13-15 tpd NO_x).
- 1 ton per day of VOC emission reductions translates into about a 0.001-0.002 ppb reduction in ozone.

Central Texans Potentially Impacted by High Ozone

- Children (<18): 462,579 people (27% of the population)
- Seniors (65+): 145,221 people (8% of the population)
- Adults (18-64) with asthma: (7% of the population)
- Adults (18-64) without asthma who have seasonal allergies (40% of the population)

Only about 18% of the population in the MSA (adults who don't have asthma or suffer from seasonal allergies) would not be at risk for suffering health effects from peak ozone levels currently measured in the region.

What is Being Done to Reduce High Ozone Levels?

- Nationally, EPA has set very stringent emissions standards for vehicles and non-road equipment that will continue to drive ozone reductions.
- EPA also sets nationwide emissions standards for various new types of stationary sources.
- Texas makes tens of millions of dollars available each year through the TERP program to incentivize voluntary emission reductions.
- A number of emission reduction standards applicable to power plants, gas stations, and fuel, apply to a large area of East Texas including all five counties in the Austin-Round Rock MSA.

Fact Sheet – EPA’s Ozone Standard Proposal and How it Could Affects Central Texas

- At the local area’s request, a number of state regulations were adopted applicable to one or more of the counties in the MSA, including:
 - the vehicle emissions inspection and maintenance program in Travis and Williamson Counties;
 - more stringent requirements for gas stations;
 - restrictions on the use of high-VOC asphalt;
 - restrictions on degreasing operations; and
- City and county governments, regional and state agencies, private firms, and non-profit groups and institutions have made hundreds of other emission reduction measure comments through the region’s Ozone Advance Program Action Plan;
 - The region recently won a Clean Air Excellence Award from the EPA in 2014 for this and prior efforts.

What Can I Do to Help Improve Air Quality?

- As a resident:
 - Replace older cars (particularly any cars that are 10+ years old) with newer, cleaner cars;
 - Replace older lawn-mowers and generators with newer lawnmowers and generators;
 - Make sure your tires are properly inflated;
 - Make sure you are up-to-date on your emissions inspection;
 - Sign up for a carpool through www.mycommutesolutions.com.
 - Take mass transit to work;
 - Bike or walk to work (although, if you have asthma, avoid prolonged exposure on high ozone days);
 - Telecommute;
 - Sign up for flexible work hours or compressed work week schedules;
 - Plan discretionary driving, lawnmowing, or any other use of engine-powered vehicles or equipment for times when it is least likely to impact high ozone (after 6 pm or on weekends, or on a day other than an ozone action day);
 - Avoid idling;
 - Conserve Water; and
 - Reduce electricity and energy consumption, particularly on predicted high ozone days.
- As a business, government agency, or institution:
 - Replace, repower, or retrofit older vehicles and equipment;
 - Incorporate emission reduction objectives in procurement decisions (for example, purchasing the lowest emission engine available for a given application or awarding points for a light-duty vehicle being certified to a higher level than average);
 - Include provisions in professional services contracts such as construction or lawn care that involve engine-powered equipment to require or encourage the use of the lowest emission equipment available;
 - Include contract provisions that prohibit or discourage emissions-generating activities to occur early in the day on high ozone days;
 - If possible, schedule emissions-generating activities outside of periods most likely to cause ozone exceedances (8 am – 6 pm, Monday-Friday, May-September);
 - Avoid testing backup generators on predicted high ozone days;
 - Increase energy efficiency;
 - Reduce water consumption;

Fact Sheet – EPA’s Ozone Standard Proposal and How it Could Affects Central Texas

- Install solar power;
- Offer flexible work schedules, telecommuting, and compressed work week options;
- Organize programs to reduce single-occupancy vehicle commuting, such as carpool matching programs, preferred parking for carpools, subsidized transit passes, etc.;
- Provide back-up services such as a guaranteed ride home if an employee has an emergency, or misses a bus or carpool;
- Provide ample on-site services such as day care or cafeterias to decrease the perceived need for employees to use personal vehicles; and
- Design new facilities to be energy and water efficient.

Expected Timelines

- October 1, 2015: ozone standards finalized;
- October 1, 2016: state nonattainment recommendations due to EPA;
- May 1, 2017: ozone data from 2016 certified by states;
- June 1, 2017: EPA proposes nonattainment areas;
- October 1, 2017: EPA finalizes nonattainment areas;
- 2018:
 - Initial “infrastructure” and interstate transport State Implementation Plans (SIPs) due;
 - Initial transportation conformity determination demonstration due;
- 2020:
 - Control strategy SIPs due to EPA for areas designated under Subpart 1 or classified Moderate or higher;
 - Marginal area attainment date;
 - Earliest date for potential redesignation to attainment;
- 2022: Subpart 1 default attainment deadline (default);
- 2023: Moderate area attainment deadline;
- 2026: Serious area attainment deadline;
- 2027: Subpart 1 fall-back attainment deadline;
- 2032: Severe area attainment deadline;
- 2037: Extreme area attainment deadline.