

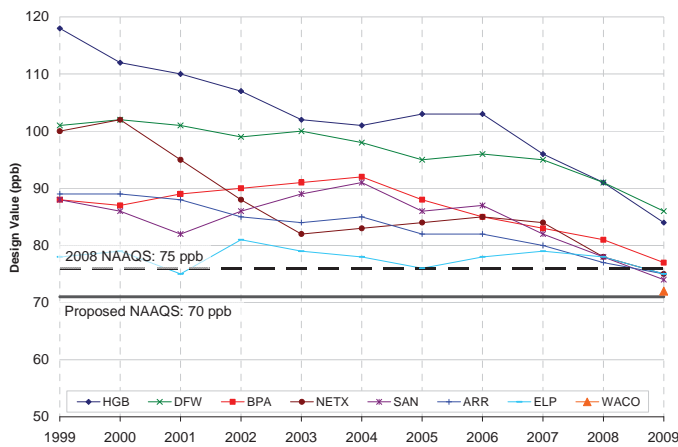


# Ozone

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## THE ISSUE

Texas has achieved extraordinary improvements in air quality. Ozone, one of six pollutants for which EPA sets National Ambient Air Quality Standards, has long impacted urban areas in Texas, especially the Houston (HGB) and Dallas-Fort Worth (DFW) regions. Through major efforts over the last 10 years, however, Texas has successfully lowered ozone to levels attaining the still binding eight-hour 85 part per billion (ppb) federal standards. On the basis of 2009 monitored data, all but one Texas urban area now meets the 85 ppb standard. DFW's ozone design value of 86 ppb is slightly above the federal limit but remains a remarkable success. DFW lowered ozone from 96-86 ppb in only four years. The Houston region, long vying with Los Angeles as the most ozone polluted city in the U.S., indeed, met the federal standard with a 2009 ozone level of 84 ppb.



Major state, local and private efforts drove this dramatic improvement in Texas: cutting-edge ozone science supported by the legislature and developed by the Texas Commission on Environmental Quality (TCEQ); stringent but targeted TCEQ emission controls; major investments by industry, state and local governments; coordinated voluntary efforts; Texas Emission Reduc-

tion Program (TERP) grants of over \$780 million; innovative technology, market-mechanisms and fine-tuned management.

However, Texas' ozone success is masked by EPA's repeated change of the federal ozone standard. In January 2010, EPA proposed to change the standard for the third time in six years. EPA's current proposal of a standard as low as 60-70 ppb would mean federal non-attainment status for as many as twelve Texas regions. Astonishingly, rural Brewster County likely would violate the new standard. Federal non-attainment status is a major barrier to economic growth and carries a high public and private cost.

EPA's far stricter standard would be practically impossible to attain in most Texas areas. Emission controls have so reduced industrial sources of ozone emissions that mobile emission sources now overwhelmingly dominate ozone formation. Regulation of mobile sources (e.g., tail pipe exhaust) is an exclusive authority of the federal government. In DFW, mobile sources account for 79 percent of ozone precursors. In HGB, mobile sources produce 72 percent. The state must comply with the federal standard but lacks the authority to address mobile sources. Natural fleet turnover is the most efficient method to improve air quality. A model year 2010 light duty vehicle emits 88 percent less oxides of nitrogen—a key driver of ozone—than a model year 2000. EPA's mandatory attainment dates, however, offer no accommodation.

Many scientists and medical doctors officially challenge EPA's justification for an ozone standard lower than 85 ppb. Dr. Roger McClellan, former Chairman of EPA's Scientific Advisory Committee, testified that EPA's stricter standard is "a policy judgment based on a flawed and inaccurate presentation of the science ... ." Dr. McClellan and many experts maintain that EPA's proposed change relies on inconsistent, speculative, outdated, and

mostly epidemiological science. At best, the science indicates weak correlation—not causation—of adverse health effects at certain ozone levels. Federal regulatory decisions of this magnitude should use more rigorous science demonstrating causal connect between ozone levels and health.

## THE FACTS

- ★ 85 of the 3,000 counties in the U.S. exceed the current federal ozone standard. Under EPA's proposed changes, as many as 650 counties would violate the standard—every county with an ozone monitor.
- ★ Without massive reduction of mobile source emissions, attainment of an ozone standard as low as 60-70 ppb is practically impossible for most areas.
- ★ In addition to DFW and HGA, EPA's new ozone standard could trigger federal non-attainment designation for Beaumont-Point Arthur, San Antonio, Tyler-Longview, Austin, El Paso, Waco, Corpus Christi, Victoria, Brownsville-Harlingen, and Brewster County.
- ★ Non-attainment status is triggered by ozone levels at one monitor (the 'design value') and not by average ozone level across a region. The majority of monitors in the DFW and HGA areas are well below the current standard.
- ★ Ozone levels at a monitor do not accurately measure human exposure. Personal indoor exposure to ozone is likely 10 percent of an outdoor monitored level.
- ★ Mobile sources—and not industrial sources—now dominate ozone formation in all but two Texas areas. In DFW, mobile sources emit 79 percent of NO<sub>x</sub>; in HGA, mobile sources emit 72 percent. Control of mobile source emissions is an exclusive authority of the federal government.

- ★ Texas citizens have made major financial investment in reducing ozone. Through November 2009, TCEQ has issued TERP grants over \$780 million. TERP fund derives from a \$15-\$20 surcharge on title fees.

## RECOMMENDATIONS

- ★ Legally challenge EPA's scientific justification for an ozone standard lower than 85 ppb. Demand EPA assume its responsibility to address mobile sources of ozone formation.
- ★ Urge EPA and the U.S. Congress to transform the convoluted SIP process imposed on states.
- ★ Avoid additional grant programs for mobile sources supported by fees on all Texans.
- ★ Avoid legislation mandating additional controls on industrial sources when mobile sources dominate ozone formation.

## RESOURCES

*Texas' Ozone Success: Changing Standards Mask Texas' Air Quality Achievements* by Kathleen Hartnett White, Texas Public Policy Foundation (May 2010) <http://www.texaspolicy.com/pdf/2010-05-RR04-Ozone-khw.pdf>.

*Update of Air Quality in Texas*, by Susana Hildebrand, Chief Engineer, Texas Commission on Environmental Quality (May 2010) [http://www.tceq.state.tx.us/assets/public/agency/AirQuality\\_Successes052010.ppt](http://www.tceq.state.tx.us/assets/public/agency/AirQuality_Successes052010.ppt).

Comments on the National Ambient Air Quality Standards for Ozone, Proposed Rule by Dr. Roger O. McClellan, *Federal Register*, Vol. 75, No.11 (19 Jan. 2010) 2938-3052.

*CASAC Critique of the Ozone OAQPS Staff Paper* by Dr. Sverre Vedal, (Henderson: 2007b) at C-30.

"Major Issues Inadequately Addressed in the Final Version of the EPA's Ozone Staff Paper" by Dr. Allen S. Lofohn, Ph.D. (28 Feb. 2007) 6-8. ★

