



HOUSTON AIR QUALITY TALKING POINTS

Houstonairquality.com

Issue – Despite significant economic and population growth, Houston air quality continues to improve

- Houston’s air quality has dramatically improved over the past twenty years, and it’s no accident.
- Despite summer meteorology that is conducive to ozone formation and being home to the largest concentration of petrochemical and refining facilities in the nation, Houston remains compliant with five out of the six federal health-based standards for common air pollutants.
- While there is still work to be done, the Houston region is making progress to reduce ozone pollution.
- Since 2010, the Houston region has added more than 736,000 residents, the largest growth of any U.S. metro area during this time period.
- With rapid regional growth, more businesses and industrial facilities are being built or expanded, more homes are being constructed and powered, more cars are on the streets and highways, and more consumer products are being used.
 - To counter the environmental impacts from this regional growth, businesses, industry and government developed and implemented improved air emissions controls, lower emitting construction equipment, more fuel-efficient cars and trucks and more energy efficient homes.
- Due to the combined efforts of many – industry and business, local, state and federal government, and individual citizens – the Houston region has been able to maintain economic growth while achieving substantial air quality improvements.

Details of Ozone Nonattainment

- Once the U.S. Environmental Protection Agency (EPA) determines that a metro area is out of compliance with an air quality standard, they designate the area as nonattainment.
- Houston is in compliance with the federal standards for particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide and lead, but is classified as nonattainment for the ozone pollution standard.
- Since Houston failed to meet the deadline to attain the 2008 ozone standard, the region must analyze and adopt control measures to show, through a State Implementation Plan (SIP), that air quality will improve and can be projected to meet that standard within a limited timeframe allowed by the Clean Air Act.
- Nonattainment areas that fail to meet the ozone standard within those limited timeframes can suffer stringent penalties, including:
 - EPA overriding states on permitting decisions
 - New businesses being required to install the most effective emission reduction technologies without consideration of cost
 - Suspension of federally supported highway and transportation projects

Air Pollution Sources and Monitoring

- The major sources of air pollution in Houston include:
 - Large stationary sources such as refineries and power plants
 - Smaller sources such as dry cleaners
 - Mobile sources such as cars, trucks, airplanes and marine vessels
 - naturally occurring sources such as some vegetation, wildfires and wind-blown dust
- Scientists have a comprehensive understanding of the state of air quality in the Houston area. With more than 45 monitoring sites, the Houston region has the most extensive monitoring network in the U.S.
 - Federal, state and local agencies collect air samples throughout the year to measure the concentration of individual compounds in the air.
- These monitoring sites do not distinguish between mobile and stationary sources of air pollution. The region's air quality is based on the worst measurements of air pollution within the entire area, no matter what pollution sources contribute to it.
- Any plans to address cleaner air quality in Houston must take into account both mobile and stationary sources.

“Cleaning” Houston’s Air

- Houston’s air quality has seen significant improvement over the past couple of decades from the reductions in emissions of ozone-forming pollutants like oxides of nitrogen (NOx) and volatile organic compounds (VOCs). Industry, small businesses, motor vehicles and heavy-duty equipment have all contributed to the improvement.
- Other strategies to reduce emissions range from replacing or retrofitting older vehicles and equipment with cleaner vehicles and equipment to encouraging alternative commuting, and even education and advocacy.
- EPA’s more stringent 2015 ozone standard means that Texans will have to reduce NOx and VOCs even further if the area is to show attainment.
- The EPA does not allow states to develop emissions standards for motor vehicle engines and fuels. Therefore, states are extremely limited in their authority to regulate emissions from the largest two sources of NOx in Texas—on-road motor vehicles such as cars and trucks and non-road vehicles such as railroad engines and boats.
- The Texas Emissions Reduction Plan, or TERP, plays a critical role in attaining cleaner air. TERP provides financial incentives to individuals, businesses, and local governments to reduce emissions from higher polluting vehicles and equipment.
- TERP’s nine different programs are designed to help reduce emissions from different types of engines by providing grant funding for a portion of the retrofit or replacement costs. The funding comes from a portion of motor vehicle registration fees.

Where can I go to find out more about Houston’s air quality?

- The Greater Houston Partnership maintains a fact-based web resource, houstonairquality.com, which lays out the facts about Houston’s air quality.
- The website provides details about Houston’s history of and work towards compliance with the six federal pollution standards. It also offers resources such as a blog on current air quality topics, frequently asked questions, images that help explain Houston’s improving air quality and resources about what you can do to help improve our air.