

Cleaner cars credited for better LA air, but pollution is still the worst in US

August 27 2012, by John Platt

The notoriously smoggy skies of Los Angeles are a little bit cleaner than you might expect, at least in one respect. According to a study by the National Oceanic and Atmospheric Administration, the levels of certain vehicle-related pollutants in Los Angeles have dropped by 98 percent since the 1960s. The study has been accepted for publication in the Journal of Geophysical Research Atmospheres but is not yet available online.

The study looked specifically at pollutants called <u>volatile organic</u> <u>compounds</u>, which are emitted by cars and trucks. VOCs are one of the contributing factors to ground-level ozone, which had hazardous not only to people, but also to plants.

The drop in VOCs was most significant from 2002 to 2010, when they were cut in half. This drop was despite the fact that drivers in Los Angeles now use three times as much gasoline and diesel fuel as they did 50 years ago.

"The reason is simple," the study's lead author, Carsten Warneke, a NOAA-funded scientist at the University of Colorado, said in a written statement. "Cars are getting cleaner." Contributing factors in the VOC decline cited by the NOAA include <u>catalytic converters</u>, improved <u>engine efficiency</u>, and reformatted fuels that are less prove to evaporation.

This doesn't mean that Los Angeles residents can breathe easier,



however. While overall VOCs have dropped, some of the compounds remain at high levels. Propane and ethane, which are emitted by the burning of natural gas and other sources, have not declined as quickly. Another NOAA study recently found that a third VOC, ethanol, is increasing.

Meanwhile, although VOCs contribute to ozone, they are not the only factor influencing LA's infamous ozone-laden smog, which remains the worst in the country, according to the annual State of the Air report from the American Lung Association.

"Ozone and <u>particle pollution</u> contribute to thousands of hospitalizations, <u>emergency room visits</u>, and deaths every year," Kari Nadeau, a Stanford Medical School professor and American Lung Association researcher, said when the State of the Air report was released. "Air pollution can stunt the lung development of children, and cause health emergencies, especially for people suffering from chronic lung disease, including asthma, chronic bronchitis, and emphysema. Both long-term and short-term exposures can result in serious health impacts."

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