



Air Quality News

New Study Shows that Heavy-Duty Diesel Trucks Are Largest Contributor to Near-Road Air Pollution

A new study, published by researchers from the University of Toronto in September 2018, in the journal *Environmental Science & Technology*, reveals that the type of vehicles travelling on roadways near residential areas influences residents' exposure to emissions more than the total traffic volume on the roadway.

The comprehensive study involved measuring vehicle emissions near roads in Vancouver and Toronto, including Ontario Highway 401, which is North America's busiest stretch of highway.

The difference between emission levels across the sites was more correlated with the number of heavy-duty diesel trucks on the road rather than number of cars.

Researchers found that air pollution levels right beside major trucking routes were close to levels seen beside Highway 401, despite the trucking routes carrying less than one-tenth of the vehicle traffic than Highway 401. "This was in part due to differences in wind and proximity to the road but, surprisingly, the number of vehicles didn't make that much of a difference," said lead researcher Greg Evans.

The data also revealed a significant drop in emissions on Highway 401 on the weekends, when personal vehicle traffic is still very high, but the volume of large truck traffic is low.

Research consistently links traffic emissions to negative effects on both the environment and human health. "Whether it be cancer, respiratory problems, cardiac problems, or neurodegenerative problems, there are numerous adverse health effects associated with the chemicals in these emissions," said Evans. "If we were able to reduce emission of pollutants like black carbon, we would also see an immediate climate benefit

Evans points out that newer model year trucks have made large improvements in their emissions profiles but that older diesel trucks are still a significant source of elevated emissions. "Those big, 18-wheeler diesel trucks last for a long time. We need to push to retrofit these old trucks with better emission treatment systems. Simply retrofitting the worse offending

trucks, or getting them off the road, is a tremendous opportunity to improve air quality in our cities."

The study will be part of a larger report scheduled to be released in December 2018 that will stress the importance of implementing long-term monitoring of traffic related air pollution in Canada, and indicating that targeting high-emitting vehicles such as older model trucks can provide a path towards improving near-road air quality.



Friday
January 11, 2019
Application Deadline for
PA DEP Environmental
Education Grants

For information on the grant program, please visit: www.dep.pa.gov

Tuesday
January 15, 2019
Application Deadline for
PA DEP DC Fast Charge
Infrastructure Grants

For information on the grant program, please visit: www.depgis.state.pa.us/ DrivingPAForward

The University of Ontario report is being released just as many states in the United States are launching diesel emission mitigation programs funded by the Volkswagen (VW) Environmental Mitigation Trust. Both Pennsylvania and New Jersey anticipate funding the removal or replacement of older diesel vehicles through the VW settlement beginning in 2019. A number of on-road and off-road diesel powered equipment types are eligible for repower and replacement under each state's program, including diesel powered local freight trucks, and transit and school buses.

Information on the Pennsylvania VW Environmental Mitigation funding programs is available at: www.depgis.state.pa.us/DrivingPAForward/.

Information on the New Jersey VW Environmental Mitigation funding programs is available at: https://www.state.nj.us/dep/vw/bmp.html.



Air Quality Regulations

General Motors Encourages Trump Administration to Consider National Electric Vehicle Mandate

On Friday October 26, 2018 the General Motors Company (GM) announced that it wants the Trump administration to back a nationwide program to boost sales of zero emission vehicles (ZEVs), like electric cars

GM says a nationwide program modeled on California's effort could result in seven million electric vehicles, or EVs, on U.S. roads by 2030. GM, the largest U.S. automaker, said the requirements would not apply if "battery cost or infrastructure targets are not practicable within the time frame."

GM product chief Mark Reuss told reporters that governments and industries in Asia and Europe "are working together to enact policies now to hasten the shift to an all-electric future. It's very simple: America has the opportunity to lead in the technologies of the future."

"We believe in a policy approach that better promotes U.S. innovation and starts a much-needed national discussion on electric vehicle development and deployment in this country," said the automaker. "A National Zero Emissions Program will drive the scale and infrastructure investments needed to allow the U.S. to lead the way to a zero emissions future."

GM said a nationwide ZEV plan would give automakers more flexibility to meet a single nationwide target, rather than specific state sales requirements.

In August, the Trump administration proposed reversing Obama administration fuel economy rules and freezing fuel economy standards at the 2020 model year levels. The administration has also proposed barring California from setting its own emissions requirements or requiring more ZEVs. The administration is considering eliminating all emissions compliance credits that automakers receive for selling EVs.

GM's proposal is being called a distraction by some environmental groups that are resisting the administration's plan to roll back the fuel economy rules. Luke Tonachel, director of clean vehicles and fuels at the Natural Resources Defense Council, said automakers should focus on maintaining the Obama era rules that call for hiking fuel efficiency requirements at about 5 percent annually through 2026.

California Air Resources Board Chief Mary Nichols said last month the state will "continue to insist on cars that produce fewer emissions, including millions more ZEVs."

The Trump administration criticizes California's ZEV mandate, saying it requires automakers to spend tens of billions of dollars developing vehicles that most consumers do not want, only to sell them at a loss.



DVRPC, 8th Floor 190 N. Independence Mall West Philadelphia, PA 19106-1520

Phone: 215.592.1800 | Fax: 215.592.9125 | Web: www.dvrpc.org