

The Alert newsletter provides monthly updates on transportation and air quality planning activities within the Delaware Valley.

May 2024

Air Quality

Latest State of the Air Report Highlights Diverging Air Quality Trends Across the Nation

Last month, the American Lung Association released its 25th annual <u>State of the Air</u> report. The report highlights that, particularly in western states, wildfires have caused an increasing number of days with unhealthy levels of particle pollution. At the same time, the report finds that the severity of ozone pollution has continued its decades-long decline thanks to environmental policy.

The report uses the air quality index (AQI) levels established by the U.S. Environmental Protection Agency (EPA) to evaluate ozone and 24-hour fine particulate matter (PM_{2.5}) pollution based on the number and severity of unhealthy days experienced over a three-year period. Where data exists, counties are assigned a letter grade for each pollutant. A weighted average of 3.2 unhealthy days or less per year constitutes a passing grade.

As was the case last year, ozone continues to be the more common cause of unhealthy days for the Greater Philadelphia region. Of the nine counties in the DVRPC region, three did not receive passing grades for ozone, but all passed for PM_{2.5}. The three counties in our region that received an "F" grade for ozone—Philadelphia, Bucks, Mercer—had a weighted average of 5.5, 5.3, and 3.7 unhealthy days respectively. However, this still represents a large improvement over years prior. For context, from 2001 to 2003, Philadelphia had a weighted average of 47.5 unhealthy ozone days per year.

The report states that while ozone continues to affect more Americans than any other single pollutant, progress is being made, with the number of people living in counties graded "F" for ozone declining for the fourth year in a row. The American Lung Association attributed much of the decline in ambient ozone levels across the country to emissions controls put in place by the Clean Air Act, as well as the economic shift away from coal.

The report also highlights the growing discrepancy in air quality between eastern and western states, especially in terms of particulate pollution. For the first time in the report's history, all 25 of the worst cities for short-term $PM_{2.5}$ pollution are located west

of the Mississippi. Las Vegas, Portland, and Seattle each saw increases in the number of unhealthy days due to particulate matter. Meanwhile, two cities in Pennsylvania, Lancaster and Pittsburgh, improved enough to no longer be among the 25 worst. Much of this geographic discrepancy in particulate pollution can be attributed to smoke from worsening wildfires in the United States and Canada.

Regarding recent policy developments, the American Lung Association praises EPA and the Biden Administration for implementing many of the recommendations made in previous reports, but it also insists more work needs to be done to address climate change and improve air quality. The report specifically applauds EPA for finalizing stricter emissions standards for light, medium-, and heavy-duty vehicles as well as implementing rules to address emissions of methane and volatile organic compounds (VOCs) from oil and gas production. The American Lung Association also states that the recent strengthening of the annual PM_{2.5} standard from 12 µg/m³ to 9 µg/m³ will save lives despite it not being as strong as the association recommended.



Save the Date

Tuesday

May 28, 2024

EPA Clean Ports Program
Air Quality Planning and
Zero Emissions
Deployment Grants

Applications Due

For more information visit: <u>www.epa.gov/ports-</u> <u>initiative/cleanports</u>

Monday

June 17, 2023

FHWA Active
Transportation
Infrastructure Investment
Program

Applications Due

Information is available at: fhwa.dot.gov/environment/bicycle_pedestrian/atiip/

The report calls on EPA to build on this progress by strengthening the standards for ambient ozone and power plant emissions, and it urges Congress to support fully funding the EPA and resist efforts to undermine the Clean Air Act.

Looking back on 25 years of publishing the *State of the Air* report, the authors stated their findings have "reflected the successes of the Clean Air Act, as emissions from transportation, power plants, and manufacturing have been reduced. In recent years, however, the findings of the report continue adding to the evidence that a changing climate is making it harder to protect human health. High ozone days and spikes in particle pollution related to extreme heat, drought, and wildfires are putting millions of people at risk and adding challenges to the work that states and cities are doing across the nation to clean up air pollution."

To read the full report and compare air quality across the country, visit www.lung.org/research/sota.

Emissions Regulation

EPA Finalizes Stronger Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles

On March 29, 2024, the U.S. Environmental Protection Agency (EPA) <u>announced</u> that it had finalized a stricter set of greenhouse gas (GHG) emission <u>standards</u> for heavy-duty vehicles such as large trucks and buses. EPA estimates the standards, which are to be phased in over model years (MY) 2027 through 2032, will prevent approximately 1 billion metric tons of GHG emissions through 2055 and will positively impact public health by reducing emissions of fine particulate matter (PM_{2.5}).

Like the standards for light- and medium- duty vehicles finalized on March 20, the performance-based heavy-duty standards are designed to encourage the adoption of zero-emissions vehicles (ZEVs) but do not mandate the use of any particular technology. Instead, the standards set average emissions targets for specific categories of vehicles in a manufacturer's fleet and allows the automaker to use a combination of strategies to meet those targets. In their final rule, EPA specifically mentions that hybrid powertrains, improvements to aerodynamics, reductions to tire rolling resistance, and the use of lower carbon fuels, such as compressed natural gas, can be used to help automakers comply with the standards without relying entirely on zero-emissions technologies. However, EPA is encouraging the expedient adoption of ZEVs by providing incentives to manufacturers who offer plug-in hybrid electric vehicles (PHEVs), battery electric vehicles (BEVs), or fuel cell electric vehicles (FCEVs) through MY 2027.

After the standards were first proposed in April of last year, EPA received more than 175,000 public comments and heard testimony from nearly 200 stakeholders at public hearings. Some commenters praised the proposal for its positive environmental impacts, especially on overburdened communities located near busy truck routes, while commenters representing truck manufactures expressed concerns about the proposed timeline given the uncertainties regarding the deployment of supportive infrastructure and the supply chains of critical components. Based on the responses, the proposal was modified to give more time in the early years to allow for the further development of vehicle technologies and deployment of fueling and charging infrastructure. Regarding the revisions, Vice President of Product Integrity for Daimler Truck North America Sean Waters stated, "We thank the agency for addressing industry concern about the challenges of the early years of the rule, and we remain committed to upholding the spirit of this regulation. [...] Ultimately, the successful transition of the commercial vehicle industry is dependent on the availability of reliable zero emission charging and refueling infrastructure and the ability to conduct business at a reasonable cost of ownership." In their press release, EPA states that between 2027 and 2055, the new standards are expected to provide the the heavy-duty industry with an annualized \$3.5 billion in savings on fuel and maintenance costs compared to an annualized cost of \$1.1 billion.

The recent standards are the third phase of the *GHG Emissions Standards for Heavy-Duty Vehicles* and builds on the previous phase adopted in 2016. The heavy-duty GHG standards represent the third and final rulemaking part of EPA's Clean Trucks Plan, which also includes the recently finalized multi-pollutant standards for light- and medium- duty vehicles and the nitrogen oxide (NO_x) emissions standards for heavy-duty vehicles adopted in 2022. According to the EPA, the transportation sector is the single largest source of GHG emissions in the United States and 25 percent of transportation sector GHG emissions come from heavy-duty vehicles.





DVRPC, 8th Floor 190 N Independence Mall West Philadelphia, PA 19106-1520 215.592.1800 | dvrpc.org | airqualitypartnership.org