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# Alert

*Alert is a monthly update on transportation and air quality planning activities in the Delaware Valley.*

## Air Quality News

### Western Wildfires are Responsible for the Region's Worst Air Quality Days of the Summer

Wildfire smoke from the western United States and central Canada was the cause of some of the worst air quality conditions of the year in the Philadelphia region. On July 19, 2021, the air quality index for fine particulate pollution or $PM_{2.5}$, reached the Code Red, or "unhealthy for everyone" level in the Greater Philadelphia region for the first time since 2014.

Each day the US Environmental Protection Agency (EPA) releases a daily air quality forecast to alert the public when air quality is going to be unhealthy for the public. The forecast is color coded on a scale from green is good to purple is hazardous. Code Orange indicates that the air is unhealthy for sensitive populations such as children and people with breathing disorders. Code Red means that the outside air is unhealthy for everyone.

$PM_{2.5}$ can be particularly dangerous to public health because the tiny particles can trigger asthma attacks and even heart attacks and stroke. The public is advised to limit strenuous activities during these days of elevated pollution and to reduce their exposure to the air outdoors when pollutants reach the Code Orange level or worse.

The US has made great strides in reducing $PM_{2.5}$ levels over the past two decades through regulations on power plants and improvements to emissions controls on heavy duty diesel engines. The Greater Philadelphia region was designated as meeting the $PM_{2.5}$ air quality standards in 2015, with Delaware County meeting the standards in 2019.

The elevated $PM_{2.5}$ levels experienced by the region on July 19 and 20, can be directly traced to plumes of smoke from uncontained wildfires in the Pacific Northwest and central Canada. According to Roisin Commane, an atmospheric scientist at Columbia University, "it's not unprecedented to see smoke travel such long distances but it doesn't always descend to the surface". The confluence of plumes of smoke from these fires resulted in unhealthy levels of microscopic particles experienced from Minnesota through Pennsylvania and on up to New England.

These fires were largely attributed to drought and rising temperatures associated with climate change and the severity of the impacts of these distant wildfires on air quality on the East Coast underscore the impact that climate change can have on environmental conditions far from the sources of the extreme weather events.

## Save the Date

**Friday**
**October 8, 2021**

**Deadline for Applications: Pennsylvania DEP Truck and Bus Fleet Grant Program**

**For more information, please visit: https://gis.dep.pa.gov/drivingpaforward/**

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**Friday**
**December 17, 2021**

**Deadline for Applications: Pennsylvania DEP Alternative Fuel Incentive Grant**

**For more information, please visit: www.dep.pa.gov and search "AFIG"**

In addition to episodic $PM_{2.5}$ events, higher temperatures associated with climate change can fuel the formation of ground-level ozone resulting in more days that do not meet the federal health-based air quality standards for that pollutant. The region does not meet the ground-level ozone air quality standards and rising temperatures are expected to make attaining those standards more difficult.

To receive air quality alerts via email or text, please visit: www.airqualitypartnership.org. Interactive maps tracing smoke plumes from wildfires can be viewed at www.fire.airnow.gov.

## Air Quality Regulations

### US EPA Plans to Review Fine Particle Pollution Standards

On June 10, 2021, US Environmental Protection Agency (EPA) administrator Michael Regan announced that the agency will review the fine particle pollution ($PM_{2.5}$) standards to determine if the standards should be tightened to better protect public health and the environment.

The Clean Air Act requires that the EPA review the National Ambient Air Quality Standards (NAAQS) every five years for six criteria pollutants ($PM_{2.5}$, ozone, carbon monoxide, lead, nitrogen dioxide, and sulfur dioxide) but nothing precludes the agency from reviewing the standards more frequently. In 2020, the EPA reviewed the $PM_{2.5}$ standard and declined to tighten the standard despite recommendations from the EPA's staff scientists.

Scientific studies published during the COVID-19 pandemic have also linked $PM_{2.5}$ pollution with higher rates of death from COVID-19. Recent studies have also shown that minority communities tend to have a higher exposure to $PM_{2.5}$ pollution because they are frequently located near highways, power plants, and other industrial facilities.

Mr. Regan stated that "the most vulnerable among us are most at risk from exposure to particulate matter, and that's why it's so important we take a hard look at these standards that haven't been updated in nine years," The Biden administration suggested this review of the standard is part of a larger strategy to address environmental justice.

The $PM_{2.5}$ Annual Standard was last revised in 2012. At that time the standard was set at twelve micrograms per cubic meter ($\mu g/m^3$). Under this review the agency will investigate the costs and benefits of tightening the standard to as low as nine $\mu g/m^3$. The EPA. expects to propose a new draft rule by the summer of 2022 and to release a final new rule by the spring of 2023. The move is a reversal of a number of Trump Adminstration rules that rolled back environmental regulations enacted during the Obama Administration.

The review is opposed by states that produce fossil fuels as well as oil and coal companies, automakers, and chemical manufacturers. Public health advocates however, support the move. "EPA's decision to reconsider the inadequate national limits on particulate matter is good news for the nation's lung health," said Harold Wimmer, chief executive of the American Lung Association. "The need is urgent for stronger standards that reflect what the science shows is needed to protect public health."

For more information on on the EPA review of the $PM_{2.5}$ NAAQS, please visit: https://www.epa.gov/naaqs/particulate-matter-pm-air-quality-standards

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

DVRPC, 8th Floor
190 N. Independence Mall West
Philadelphia, PA 19106-1520
**Phone:** 215.592.1800 | **Fax:** 215.592.9125 | **Web:** www.dvrpc.org

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