Air Quality Regulations

EPA Finds that Delaware County is Meeting the 2012 Fine Particulate Matter Standard

On December 13, 2016, the Environmental Protection Agency (EPA) published a direct final rule stating that Delaware County is now meeting the 2012 Annual Fine Particulate Matter (PM\textsubscript{2.5}) air quality standard.

The EPA uses a measurement called a design value to determine if the standard is being met. The design value for PM\textsubscript{2.5} is defined as the annual average of three consecutive years of air quality monitor readings. The standard is met when the air quality monitor’s design value is below the National Ambient Air Quality Standard (NAAQS) of 12 micrograms per cubic meter (µg/m\textsuperscript{3}) of air.

The PM\textsubscript{2.5} air quality monitor in Delaware County has a design value of 11.6 µg/m\textsuperscript{3} when considering certified data from the years 2013, 2014, and 2015.

This action proposed by EPA, is referred to as a Clean Data Determination. The action states that Delaware County is meeting the NAAQS for PM\textsubscript{2.5} but does not change the county’s official designation from “non-attainment” to “attainment”. In order for Delaware County to be re-designated as in attainment of the 2012 Annual PM\textsubscript{2.5} NAAQS, the state Department of Environmental Protection (DEP) must submit a plan outlining how the county will continue meeting the PM\textsubscript{2.5} NAAQS into the future.

The Clean Data Determination does relieve the state from certain air quality planning requirements and does confirm that the county met the deadline to attain the PM\textsubscript{2.5} NAAQS by the federally regulated attainment date. The determination does not impact the need to demonstrate transportation conformity for this standard for Delaware County.

The EPA held a 30-day public comment period on this action, beginning on December 12, 2016 and anticipates that the action will take effect on February 13, 2017.

With this ruling, the entire DVRPC region, in Pennsylvania and New Jersey, is meeting all of the current 24-hr and annual PM\textsubscript{2.5} NAAQS, thanks largely to local and national reductions of emissions from power plants and diesel powered vehicles and equipment.

For more information on the attainment status of the DVRPC region, please contact Sean Greene at sgreene@dvrpc.org
States Submit Recommendations for Non-Attainment Designations for the 2015 Ozone Air Quality Standard

In September and October 2016, Delaware, New Jersey, and Pennsylvania submitted recommendations to the EPA to designate non-attainment areas for the 2015 Ozone NAAQS based on air quality monitoring data and a five-part analysis that includes travel patterns, meteorology, and jurisdictional boundaries. These recommendations are a major milestone in the implementation of the new ozone standard that was approved by the EPA in December 2015.

EPA will review the states’ recommendations and propose final ozone non-attainment areas late in 2017. Once the non-attainment areas are finalized, states will have defined periods of time to meet that standard based on the severity of the area’s ozone problem. Most counties in the DVRPC region are expected to be classified as having a “marginal” ozone problem and thus would be given three years to attain the 2015 Ozone NAAQs. The Philadelphia-Camden-Wilmington Non-Attainment Area for the 2008 Ozone NAAQs included sixteen counties in Delaware, Maryland, New Jersey, and Pennsylvania, including the entire DVRPC region.

Pennsylvania has recommended that the five counties in the DVRPC region be designated as non-attainment for the ozone standard. This recommendation is consistent with the ozone non-attainment areas for previous NAAQS. Pennsylvania’s recommendation does not address counties outside the state.

New Jersey and Delaware have recommended much larger non-attainment areas than the 2008 Philadelphia-Camden-Wilmington Non-Attainment Area. New Jersey has recommended an area that encompasses counties along the I-95 corridor from Washington DC all the way to Connecticut. Delaware has proposed a non-attainment area that spans fifteen states from Wisconsin to Tennessee in the west, to New York and North Carolina in the east.

New Jersey and Delaware maintain that most of the ozone pre-cursor pollution originates outside the New Jersey and Delaware borders and that emission control measures within limited non-attainment areas do not address emissions from upwind states. They maintain that the non-attainment areas should reflect the sources of those emissions, including states in the Southeast and Midwest. These larger non-attainment areas would, in theory, help to standardize emission control efforts across state borders and improve air quality in downwind states receiving the emissions.

For more information on the states’ recommendations for the 2015 Ozone NAAQS Non-Attainment Areas, please visit: www.epa.gov/ozone-designations/ozone-designations-regulatory-actions

New Study Shows that a Sedentary Lifestyle May Increase the Risk of Ozone Related Asthma Symptoms

In a new study published in December 2016, in the American Journal of Physiology, EPA researchers found that sedentary rats exposed to varying degrees of ozone had higher markers for chronic disease, including diabetes and asthma, when compared to counterparts that were more active. The researchers concluded that an inactive lifestyle may increase the risk of environmentally induced asthma symptoms.

The research team claims that while preliminary in nature, the findings of this animal study provide clues to environmental exposure in humans, “Such a study could highlight the importance of a model of childhood sedentary versus active lifestyle and effects on susceptibility as an adult.”

For more information on the study “Active Versus Sedentary Lifestyle From Weaning to Adulthood and Susceptibility to Ozone in Rats”, please visit: http://ajplung.physiology.org