

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



Air Quality Regulations

U.S. Supreme Court Upholds EPA's Cross State Air Pollution Rule

On April 29, 2014, the Supreme Court announced the decision to uphold the U.S. Environmental Protection Agency's (EPA) Cross State Air Pollution Rule (CSAPR). The Court's decision settles years of legal battles over the EPA's rules to control emissions from refineries and power plants that contribute to air pollution in downwind states and prevents those downwind states form attaining the National Ambient Air Quality Standards (NAAQS).

The CSAPR covers 28 states in the eastern U.S. and replaced the Clean Air Interstate Rule, which was adopted by the EPA in 2005 but was subsequently remanded by the Supreme Court in 2008. At that time, the Court required the EPA to develop new rules to address the interstate transport of sulfur dioxide (SO₂) and nitrogen oxides (NO_x). The EPA responded by adopting the CSAPR which allows states to require emissions reductions in locations where the costs of reducing SO₂ and NO_x was the lowest and created a trading system where states could buy and sell pollution credits in an attempt to encourage cost effective pollution control.

After adopting the CSAPR, the EPA was sued by 14 upwind midwestern and southern states that host some of the nation's oldest and most polluting power plants. States in the northeast supported the regulation as a necessary tool to help them attain the NAAQS.

Speaking for the majority of the Court, Justice Ruth Bader Ginsberg acknowledged the challenges in identifying just how much pollution any state contributes to a neighboring state but that the CSAPR includes enough flexibility for states to address this issue without overreaching the provisions of the Clean Air Act.

The Court's ruling was hailed as a victory for public health by EPA administrator Gina McCarthy. SO_2 and NO_x have the ability to travel thousands of miles on air currents and then interact with other chemical compounds to form ozone and fine particle pollution (PM_{2.5}). States downwind from these emissions sources have long claimed that it is impossible for them to meet the NAAQS when they have no control over the emissions sources and background levels of pollution in the air reach levels near the air quality standards before local emissions even enter the mix. Now that the CSAPR has been upheld, the EPA can move forward to implement the rule and downwind states can include the provisions and



Friday, May 16, 2014

Healthy Communities Task Force 10:00 am Location of Meeting: DVRPC Conference Center 8th Floor 6th and Race Streets Philadelphia, PA

> Thursday, June 26, 2014

Public Meeting: FY 2015 TIP for PA, Connections 2040 Long-Range Plan Amendments and Conformity Determination for TIP and Plan 4:00 – 6:00 pm Location of Meeting: DVRPC Conference Center 8th Floor 6th and Race Streets

anticipated emissions reductions from the rule in future plans to demonstrate attainment of the NAAQS.

For more information on the EPA's CSAPR please visit: <u>www.epa.gov/airtransport/CSAPR/index.html</u>.

Tier 3 Gasoline Standards to become Effective in June 2014

In March 2014 the EPA finalized the Tier 3 Gasoline Rule that would reduce the amount of sulfur in gasoline from 30 parts per million (ppm) to 10 ppm. On Monday, April 28, 2014, the Final Rule was published in the *Federal Register*, clearing the way for implementation of the new rule.

The rule will become effective on June 27, 2014 and will require gasoline refiners to meet the new standards beginning in 2017. The rule does include phase-in provisions for smaller refineries and sets a goal for total compliance by 2025.

The rule is supported by auto makers who claim that lower sulfur content in gasoline is critical to helping cars and light trucks meet new EPA emissions standards. Sulfur interferes with a vehicle's emissions control system. By reducing the sulfur in fuel, these systems are more effective at removing nitrogen oxides and volatile organic compounds, the two constituents of ozone pollution, from automobile emissions.



Health and Air Quality

Study Finds Minorities Are Exposed to Higher Levels of Air Pollution Even After Income is Taken into Account

A recent study published by researchers at the University of Minnesota found that non-whites' exposure to nitrogen dioxide (NO_2) is 38 percent higher than that of whites. The researchers used high-resolution satellite data and ground-level monitoring data to estimate NO_2 concentrations at the U.S. Census Block Group level and census data on race, ethnicity, education, age, and income to measure populations' exposure to NO_2 emissions for every county and urban area in the nation.

The research indicates that even after the statistics account for disparities in income, race is still a major factor in predicting exposure to NO_2 . The study reported that within individual urban areas, on average, NO_2 concentration disparities by race (after controlling for income) are more than two times greater than NO_2 concentration disparities by income (after controlling for race). The study found that these levels of disparity also held true for rural areas, even though the overall exposure to NO_2 was found to be considerably lower in rural as opposed to urban areas.

Nitrogen dioxide is a product of internal combustion engines (cars and trucks) and power generation. It is one of the six criteria pollutants regulated by the U.S. Environmental Protection Agency and is implicated in low birth weights, increased risk for heart attacks, and a cause of asthma. In addition to being a health risk factor by itself, NO₂ can also react with other chemicals to form ground-level ozone and fine particle pollution ($PM_{2.5}$). NO₂ levels can vary significantly as distance from sources increases but communities near highways and power plants experience the highest concentrations of ambient NO₂.

One product of the study is a national map that identifies counties and urban areas that experience inequitable exposure to NO_2 . This data set can serve as a tool for policy makers and environmental justice advocates to identify priority communities for mitigating exposure to this criteria pollutant.

To view the original article, "National Patterns in Environmental Injustice and Inequality: Outdoor NO₂ Air Pollution in the United States", please visit: www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0094431.



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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