

A!ert

dvrpc | May 2017

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

Air Quality Partnership

The Air Quality Partnership Recognizes Five Organizations for Their Efforts to Improve Air Quality in the Region

The first week of May generally indicates the beginning of Greater Philadelphia's poor air quality season. When warmer weather returns, sunlight fuels the chemical reaction that results in the formation of ground-level ozone. During this time of year, the Air Quality Partnership, a program of DVRPC, honors local initiatives and best practices to reduce air pollution. This year, five organizations in the region received 2017 Air Quality Partnership Excellence Awards. The recipients were nominated by the Volunteer AQP Board, which consists of representatives from Transportation Management Associations, environmental organizations, universities, and partner government agencies. This year's winners are:

The College of New Jersey (TCNJ), Ewing, New Jersey: TCNJ has been implementing a comprehensive transportation plan to reduce emissions associated with commuting and transportation. Activities include developing a rideshare phone app, installing electric car charging stations, mapping links to regional bicycle and pedestrian trails, providing bicycle facilities, and implementing distance learning and telecommuting options.

South Jersey Port Corporation (SJPC), Camden, New Jersey: SJPC has been closely working with the NJ Department of Environmental Protection (DEP) to replace older diesel equipment, such as cranes, cargo handling equipment, and forklifts, to reduce emissions from port activities.

Pottstown School District, Pottstown, Pennsylvania: The Pottstown School District initiated a "walking school bus" for students at Rupert Elementary. This project not only improves air quality by reducing emissions, but encourages exercise and walking as an alternative to driving. In 2016, the program's second year, more than 50 students signed up for the walking school bus, and they've totaled almost 500 miles.

Suburban Transportation Network (TransNet), Blue Bell, Pennsylvania: TransNet reduces emissions from single occupancy vehicles while providing mobility alternatives for local residents through an array of ride options. They include Senior Shared Ride; Upper Merion Rambler; Persons with Disabilities and Medical Assistance Transportation Programs; and last-mile and convenience shuttles for St. Joseph's University, Montgomery County Community College East and West Campuses, and many other employers and corporate centers.



Save the Date

Wednesday
May 31, 2017

**Green and Healthy Schools
Showcase**
3:00 – 7:00 PM

Location of Event:
Jenkintown School District
325 Highland Ave.
Jenkintown, PA

Wednesday
June 14, 2017

**Camden Environmental
Summit**

Location of Event:
Cooper Medical School of
Rowan University
401 Broadway
Camden, NJ



The University of Pennsylvania (Penn), Philadelphia, Pennsylvania: Penn reduces emissions from transportation sources through a comprehensive program that includes commuter transit benefits, parking management strategies, electric vehicle charging stations, bicycle facilities, alternative fueled fleet vehicles, and last-mile shuttles and van pools, among other sustainability measures. Penn utilizes a suite of strategies that serves as best practice examples for other organizations.

DVRPC and the Air Quality Partnership recognized these organizations for their outstanding leadership in improving air quality during Air Quality Awareness Week, which runs from May 1 to May 5 and it marks the start of the AQP's ozone season, which runs through September. These awardees lead by example and show how every organization can help improve air quality and protect public health.

For more information on the Air Quality Excellence Awards, please visit: www.airqualitypartnership.org



Air Quality Information

Keeping Cool in the Summer Can Increase Air Pollution

As the weather warms, so does the use of air conditioners. Running these devices requires power plants to increase electricity production, causing air polluting emissions to rise. An analysis of 27 states found that, on average, summer emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon dioxide (CO₂) go up by hundreds to thousands of metric tons per degree Celsius of temperature increase, according to a report in the American Chemical Society (ACS) journal *Environmental Science & Technology*.

There has been considerable research on the influence of weather and climate on atmospheric chemistry. But few studies have examined the specific effects of climate on electricity emissions and air quality. Although overall emissions have dropped due to pollution control devices and a drop in coal use, regional and seasonal increases in power plant pollution could affect people's health and the environment. SO₂ and NO_x, both of which are regulated in the U.S., can cause respiratory problems, particularly in children, people with asthma and the elderly. CO₂ is a primary greenhouse gas targeted by power plant regulations. The authors of the report wanted to quantify the historical relationship between summertime air temperature and the power plant emissions of these three gases.

Using data collected between 2003 and 2014, the researchers analyzed the numbers on electricity emissions in 27 states, mostly in the eastern U.S. From this analysis, they observed that power plants released over three percent more SO₂, NO_x, and CO₂, on average, per degree Celsius increase in temperature. States with more coal power plants such as Ohio, Pennsylvania, and Indiana released the most electricity-related SO₂ emissions in the summer, at more than 1,300 metric tons per day per state. However, New Jersey, Connecticut, and Vermont power plants released very little SO₂. States, like Texas, with a large power demand showed high emissions of all pollutants, but smaller changes in emissions per degree Celsius. Overall, the calculations showed that hotter outdoor temperatures correlated with 140,000 metric tons more CO₂ emissions. The researchers say that making buildings more energy efficient, especially on hot days, could play an important role in lowering power-plant emissions and improving air quality in the future.

For more information on the ACS report, please visit: www.acs.org.



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