

Air Pollution Knows No Bounds: Recommendations for Reducing Smog Throughout New Jersey and Beyond

What was the problem/situation?

Exposure to air pollutants, such as ozone, affects all New Jersey residents as well as many people living beyond New Jersey's borders. While New Jersey air quality has greatly improved over the past two decades, and now meets most federal air quality standards, the state has not yet attained the federal Environmental Protection Agency's National Ambient Air Quality Standard (NAAQS) for ground-level ozone. This is due to the large numbers of motor vehicles in the region, as well as many manufacturing facilities and power plants.



Ozone, commonly known as "smog," is a pollutant not directly emitted from a pollution source, but, rather is chemically formed in a reaction between emissions of nitrogen oxides and volatile organic compounds in the presence of sunlight. Ozone precursor pollutants can be carried through the air hundreds of miles away from where originally emitted, adversely affecting the air quality in downwind states in a process known as interstate transport.

How was Tracking involved?

In order to obtain a better understanding of the formation and transport of ozone, the New Jersey Clean Air Council (CAC) nominated Dr. Richard Opiekun, data coordinator for New Jersey's Environmental Public Health Tracking Project and an environmental scientist with expertise in human exposure assessment, to co-chair their annual 2015 public hearing titled, "Air Pollution Knows No Bounds: Reducing Smog Regionally". Dr. Opiekun serves as a CAC member and is currently vice-chairman of the CAC. Through testimony

presented at their April 2015 annual hearing, the CAC was better able to identify and locate the various sources emitting ozone precursors, and identify existing and new strategies that can be implemented locally and across the ozone transport region. Following the day-long public hearing which included round-table discussions with regional experts in air pollution, occupational medicine, atmospheric chemistry, environmental justice, and policy and public planning, as well as a representative of the USEPA, the CAC issued a report of recommendations for addressing this issue to the Commissioner of Environmental Protection for the State of New Jersey.

What action was taken to resolve the problem?

As co-editor of this year's CAC report, Dr. Opiekun worked with members of the Council to review the material presented at the public hearing and formulate both short-term and long-term actionable recommendations to address the problem of ozone transport affecting New Jersey. Key to successful implementation of their recommendations was identifying the need to have New Jersey undertake a "stewardship



approach" to involve a variety of local and regional stewards (stakeholders) in state and local government and the small business sector. Since many pollutants cannot be specifically tied to one industry or one emitter, it takes more than one entity to identify, reduce, and monitor a pollutant; determine the best emission control technology alternatives; and examine environmental and health impacts from exposure to the pollutant or pollutant class. The Council also identified the need for USEPA to hold states that

interfere with the maintenance or attainment of the ozone NAAQS in neighboring states accountable. This goal can be accomplished through use of the section 110 (a)(2)(D) "good neighbor" provision of the Federal Clean Air Act, ensuring that adequate measures to address ozone transport be incorporated in all state implementation plans. Using these methods, New Jersey and other downwind states can achieve the NAAQS and, regionally, the various states will be on a level economic playing field. Dr. Opiekun was instrumental in putting forth the proposal that New Jersey should promote the operation of more green fleets within the State, while continuing to prioritize diversification of the State's transportation infrastructure. According to Dr. Opiekun, "Our densely populated state needs a more widespread public transportation system. While the northeastern region of our state has many bus, train, and light rail transportation alternatives, the central and southern portions of New Jersey have few, if any, public transit options. Expanding public

transportation throughout the entire state is a vital element in protecting the health of New Jersey's residents and its environment.”

The full CAC report can be found on the CAC's website at:

http://www.state.nj.us/dep/cleanair/hearings/ph_2015.htm

NJSHAD serves as the main data portal for NJDOH, providing public access to data and information from the entire New Jersey Department of Health, and hosts datasets for the New Jersey Environmental Public Health Tracking (NJEPHT) Program. NJSHAD provides static public health indicators which combine data and information, and dynamic custom public health query tools. The functionality, content, and utility of NJSHAD and the NJEPHT portal are constantly being enhanced.

The Clean Air Council, created in 1954, serves in an advisory capacity to make recommendations to the DEP regarding air matters. It consists of eighteen members, fourteen of which are appointed by the Governor. Members serve four-year terms, and include the Commissioner of Health, Commissioner of Community Affairs, Secretary of Agriculture, and Secretary of the Board of Directors of the NJ Commerce Commission, *ex-officio*.