

Healthy Communities Task Force

Monday, June 8, 2015

Welcome, Patty Elkis

Introduction, Valerie Arkoosh, MD, MPH, Vice-Chair, Montgomery County Board of Commissioners

Valerie Arkoosh introduced the topic of the meeting—air quality in Southeastern Pennsylvania—and stressed the importance of taking action on the path towards improving air quality. She noted that Philadelphia has particularly challenged air quality and that often this environmental burden falls on the most disadvantaged populations. She referenced the Broad Street Cholera outbreak as the beginning of the study of public health and used it to underscore her point that understanding underlying problems can allow for simple and creative solutions.

Introduction, Alison Riley, Chair, Philadelphia Diesel Difference and Voluntary Programs Coordinator with the Philadelphia Department of Public Health, Air Management Services

Alison Riley gave an overview of the Philadelphia Diesel Difference group and its initiative to decrease diesel pollution at the local level through practices such as vehicle retrofitting. She noted that regulating mobile sources of pollution is particularly difficult for local governments. She continued by explaining the negative health outcomes that diesel pollution is connected with, such as increases in death, heart attacks, asthma, and millions in health care and expenses. Alison stressed the need to find more creative solutions to decrease diesel pollution.

Presentations & Panel Discussion: Highway and Diesel Emissions; Actions to Protect our Communities

Overview of the Community Assessment of Freeway Exposure and Health Study (CAFEH) in Boston, Allison Patton

Allison Patton, Ph.D is a postdoctoral appointee in Biomedical and Health Sciences at Rutgers University. She was part of the Community Assessment of Freeway Exposure and Health Study which served as the larger umbrella for five related community-based participatory research air pollution studies. The five projects included the original CAFEH study, The Clean Air Project, The Boston Puerto Rican Health Study, Improving the Health of Near Highway Communities, and Visualizing Air Pollution. The focus of this

research was to inform policymakers about air pollution and to present possible solutions to reduce exposure to air pollution around roadways.

The aim of the original CAFEH study was to assess the association between exposure to air pollutants emanating from highway traffic and cardiac health in communities near highways. The study measured the concentrations of Ultra Fine Particles through three main data sources: 162 days of mobile monitoring, 704 surveys, and 451 clinic visits to determine if there was a correlation between living in near-highway communities and cardiac health issues. The study concluded that reducing ultra-fine particulate matter could improve health outcomes.

Under the Clean Air Project and the Puerto Rican Health Study the research team placed real or sham HEPA filters in homes of non-smoking residents. The real and sham filters were switched after three weeks. This study concluded that the HEPA filters decreased particle numbers in some but not all homes due to opening windows during cooking or neighbors smoking.

The goal of the Improving Health of Near Highway Communities program was to utilize the accumulated knowledge to influence the design of new development. Allison and her team evaluated a total of 11 proposed tactics, such as zoning and land use, and found that they had varying results. Finally, she presented a design charrette, where participants developed design solutions for two case studies (a proposed housing development in Somerville, MA and a proposed school in Boston's Chinatown neighborhood). All of Alison's and the team's projects are summarized at sites.tufts.edu/CAFEH.

Freight as a Good Neighbor: Air Quality Improvement, Gerry Coyle

Gerry Coyle is the Vice-President of the Environmental and Sustainable Operations at the Evans Network of Companies. In this role, Gerry aids in fostering relationships between public and private enterprises to achieve efficiency and modernization in freight trucking. While working directly with ports across the United States, the Evans Network aided in providing diesel emission retrofits and drayage truck replacements. Truck replacement was done by providing low interest loans to independent truckers. These projects dramatically changed their fleet profile so that 52% of trucks are now 2004 or newer. The company and Gerry Coyle stressed the importance of being socially responsible and advocating voluntary programs pertaining to protecting environmental policy.

Gerry noted that one of the biggest challenges ports face in improving air quality is trying to limit the amount of time trucks spend idling. This problem is particularly difficult at ports with idling times of up to 5 hours. He recommended potential improvements, such as greater stakeholder involvement, increased technology modernization and automation, modernized process improvements (open ports earlier and keeping them open later), increased facility and equipment upgrades, and more efficient measurement and reporting strategies.

The Port Authority of New York and New Jersey's Clean Air Strategy, William Nurthen

William Nurthen is the General Manager of the Port Authority of New York and New Jersey. In 2009, Port Authority, along with other stakeholders, developed the Clean Air Strategy to make the port both environmentally and economically sustainable. During its development, the Port Authority kept in mind the need for identifying emission reduction actions at all port sources, incorporating feedback from stakeholders, and tracking the progress once the strategy was underway. The main goal of the strategy was to help bring the region into attainment of air quality standards by decreasing overall emissions while not slowing port growth. As of 2010, 80% of the committed actions from the original plan were completed or underway, and there has been an average decrease of 17% of emissions despite a 4.6% increase in cargo volume at the port.

The actions taken under this plan include fuel incentive programs for Ocean Going Vessels (OGV) and trucks (HHDV), replacement and retrofitting programs for trucks (HHDV), railways, and Harbor Crafts (HC), and fleet modernization of Cargo Handling Equipment (CHE). Similarly to the Evans Network, the Port Authority offered low interest loans to independent truckers to help them purchase newer, more efficient trucks. The Port also started to deny access to older trucks, and starting in 2017 the port will deny access to any truck without an engine 2007 or newer. Overall, the 2012 Port Commerce Department Emissions Inventory shows an average decrease from the 2006 baseline of 33% across criteria air pollutants associated with port operations.

Continuing with this success The Port Authority and other stakeholder groups are developing and revising actions to take the program through 2020. Some questions that were kept in mind included: are the existing future actions still feasible? Why were some of the committed actions not started? The updated clean air strategy is located on the Port Authority website as of March 2015.