Ashley Funk Petition to Establish Regulations to Reduce Fossil Fuel Carbon Dioxide Emissions

Environmental Quality Board Meeting
Aug. 19, 2014
Sept. 6, 2013 – The Environmental Quality Board (board) received a petition for rulemaking on behalf of Ashley Funk and Kids vs Global Warming.

Nov. 19, 2013 – The petitioner presented why the board should accept the Petition for Rulemaking.
• The petition cites scientific studies and other reasons to accept the petition including:

  – Anthropogenic climate change is occurring and is threatening the stability of the global climate.

  – Climate change is already occurring in Pennsylvania and is projected to significantly impact the state in the future.
Petitioners request that a rule be adopted to achieve the general goal of reducing CO$_2$ emissions:

- Regulatory goal
- Baseline emission rate
- Determination of annual CO$_2$ emission rate
- Reductions in annual CO$_2$ emission rate
Nov. 19, 2013 – DEP recommended acceptance and the board voted unanimously to accept the petition for further study.

DEP’s April 15 Report

• April 15, 2014 – Evaluation report to the petitioners recommending denial

• Report identified substantive actions that reduce greenhouse gas (GHG) emissions from fossil fuel CO₂ sources in Pennsylvania.
Summary of DEP’s April 15 Report

• Actions taken to reduce GHG emissions in Pennsylvania include:
  – Pennsylvania AEPS
  – Act 129 of 2008, Phases I and II
  – Pennsylvania Clean Vehicles Program
  – Biofuel Development and In-State Production Incentive Act
  – Pennsylvania Climate Change Act
  – Best Available Control Technology limits for CO2 emissions
  – Implementation of federal GHG emission reduction requirements

• DEP will also develop and implement additional measures to reduce CO2 emissions from new and existing electric generating units after EPA promulgates final rules.
EPA’s Section 111(d) Proposal

- EPA established CO2 emission targets using:
  - Coal-fired boiler heat rate improvements (assumed 6 percent)
  - Switching to natural gas fired units
  - Switching to additional nuclear power
  - More renewable energy
  - Energy efficiency programs (“outside the fence”)
### 111(d) Proposal Effect on PA Coal Burn

- Pennsylvania’s coal fleet annual capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity Factor</th>
<th>Coal Consumption</th>
<th>Reduction in Coal Consumption from 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>73.4%</td>
<td>43.4 million tons</td>
<td>N/A</td>
</tr>
<tr>
<td>2012</td>
<td>54.6%</td>
<td>33.0 million tons</td>
<td>24%</td>
</tr>
<tr>
<td>2020</td>
<td>23.7%</td>
<td>12.5 million tons</td>
<td>71%</td>
</tr>
<tr>
<td>2030</td>
<td>16.9%</td>
<td>10.5 million tons</td>
<td>76%</td>
</tr>
</tbody>
</table>
DEP recommended that the petition be denied for the following reasons:

– Pennsylvania has already implemented a number of cost-effective GHG emission reduction strategies;

– Pennsylvania will continue to evaluate and implement cost-effective GHG emission reduction strategies; and

– The petition’s recommendation to reduce emissions by six percent per year through 2050 from sources in Pennsylvania will not achieve an atmospheric concentration of 350 ppm CO₂.
May 30, 2014 – The petitioners requested that the board reject the DEP’s recommendation and order DEP to develop and promulgate regulations consistent with the petition.

Petitioners responded stating:

- Article 1, Section 27 requires the commonwealth to protect the atmosphere;

- Science shows that average global surface heating must not exceed 1°C this century; and

- The petition does not seek to have Pennsylvania single-handedly restore the concentration of CO₂ in the atmosphere to 350 ppm.
• DEP acknowledges that it has an important role as trustee in protecting and preserving the rights and values contained in Article I, Section 27 of the Pennsylvania Constitution.

• Protection of the atmosphere requires the efforts of multiple trustees not to mention participation by the public - in this commonwealth, nationally and around the world.

• DEP plays a substantial role, within the scope of its legal authority and with a balanced approach to sustainable development, in reducing CO$_2$ emissions.
• Identified a number of actions that are being taken to reduce GHGs in Pennsylvania

• CO2 emissions projected to decrease by:
  – 14.55 MMtCO2e by 2015
  – 24.64 MMtCO2e by 2020

• Pennsylvania GHG reduction strategy already affects all of the major GHG-emitting source categories in Pennsylvania
States’ Denial of GHG Rulemaking Petitions

- Alabama
- Arkansas
- Connecticut
- Delaware
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Mississippi
- Missouri
- Ohio
- Oklahoma
- Pennsylvania (2012)
- Nebraska
- New Jersey
- New York
- North Carolina
- North Dakota
- New Hampshire
- Nevada
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming
Other Actions

• To date, lawsuits in the following states have been denied, dismissed or are under appeal:

  – Alaska, Arizona, California, Colorado, Kansas, Minnesota, Montana, New Mexico, and Oregon.

• On June 5, 2014, the U.S. Court of Appeals for the District of Columbia affirmed the district court's dismissal of the case against the federal government.
DEP Recommendation

• DEP does not recommend to the Board development of the requested regulatory program because it will not achieve the desired outcomes.

• As a result of its April 15 Report, the Petitioner’s Reply and DEP’s Response to that Reply, DEP does not recommend pursuing a regulatory amendment.
Vincent J. Brisini
Deputy Secretary for Waste, Air, Radiation and Remediation

Joyce E. Epps
Director, Bureau of Air Quality

Robert Reiley
Bureau of Regulatory Counsel