



LEAGUE OF WOMEN VOTERS
OF PENNSYLVANIA

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The League of Women Voter of Pennsylvania

Comments to the Department of Environmental Protection
on the Design of a State Plan to Implement
Section 111(d) Emission Guidelines

Harrisburg, Pennsylvania
Monday, December 9, 2013

Good afternoon. I am Susan Carty, President of the League of Women Voters of Pennsylvania for whom I am speaking. The League is grateful to the Department of Environmental Protection for seeking input to address the implementation of Section III (d).

The League of Women Voters at local, state, and national levels have studied and developed positions on environmental protection and pollution control.

We believe:

Environmental protection and pollution control, including waste management, should be considered a cost of providing a product or service. Consumers, taxpayers and ratepayers must expect to pay some of the costs. The League supports policies that accelerate pollution control, including federal financial assistance for state and local programs.

The League supports:

- *regulation of pollution sources by control and penalties;*
- *inspection and monitoring;*
- *full disclosure of pollution data;*
- *incentives to accelerate pollution control;and*
- *vigorous enforcement mechanisms, including sanctions for states and localities that do not comply with federal standards and substantial fines for noncompliance.*

With specific regard to air quality from electric generating units, the League supports:

- *regulation and reduction of pollution from stationary sources;*
- *regulation and reduction of ambient toxic-air pollutants; and*
- *measures to reduce transboundary air pollutants, such as ozone and those that cause acid deposition.¹*

¹Excerpts from the LWV position on Environmental Protection and Pollution Control found at <http://www.lwv.org/content/environmental-protection-and-pollution-control>

We understand that Pennsylvania is not only a producer of fossil fuels, but also a consumer. A 2009 report by our Department of Conservation and Natural Resources indicated that our Commonwealth is responsible for 1% of the world's man-made greenhouse gas (GHG) emissions.² In 2000, about one-third of these emissions were the result of electricity generating plants. Although these gases have increased by 8% since 1990, these numbers have fluctuated based on a variety of factors such as our economy, the price of fuel and even weather conditions. In 2011, US greenhouse gas emissions decreased compared to 2010 levels. This decrease was primarily due to a decrease in the carbon intensity of fuels consumed to generate electricity due to a decrease in coal consumption, with increased natural gas consumption and a significant increase in hydropower used.

Greenhouse gas GHG emissions are a critical component in addressing climate change, the greatest environmental challenge of our, or perhaps any, generation. Because the League is calling for prompt action to cut this country's GHG emissions, we are pleased that Pennsylvania is responding to this issue. The most significant contributor to Pennsylvania's emissions growth is the electricity generation sector, two-thirds of which are the result of activities in residential and commercial buildings - primarily for heating and cooling.³

Regarding implementation of section III (d) on GHG emissions, the League has the following questions:

- Is the emission reduction target:
 - legally binding
 - consistent with Pennsylvania's fair share of safe global emissions
 - monitored and enforced in both an efficient and effective manner
 - encouraged by incentives
 - punished by meaningful fines that promote compliance
 - achievable in the shortest possible time frame
 - mandated for periodic review

- Is there an integral communications strategy and action plan that will promote public participation and compliance needed for implementation?

- Are the necessary laws and regulations in place to achieve the goal?

- Will local government, business, organizations, public agencies, educational and religious institutions be encouraged to support and adopt programs to achieve these goals?

- How will investments in energy production from non-fossil fuel sources be coordinated with this implementation plan to help the Commonwealth not only reach but exceed the reduced GHG target?

As part of the bigger picture, the League has reservations regarding the assertions found in Pennsylvania's Final Climate Change Action Plan of 2009. Based on a variety of factors, GHG emissions from electricity consumption are expected to fall 10% by 2020.⁴ This takes into account the conversion of generating plants from coal to gas. However, it appears to note the increase in methane emissions. The U.S. Environmental Protection Agency (EPA) website notes:

² http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_001957.pdf

³ <http://www.epa.gov/climatechange/ghgemissions/sources.html>

⁴ http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_001957.pdf

*Methane (CH₄) is a greenhouse gas that remains in the atmosphere for approximately 9- 15 years. Methane is over 20 times more effective in trapping heat in the atmosphere than carbon dioxide (CO₂) over a 100-year period . . .*⁵

While methane comes from both man-made and natural sources, the impact of natural gas extraction, production, and transmission cannot be ignored in our Commonwealth. A study based on sampling of the air in Leroy Township, Bradford County conducted in 2012 resulted in the following conclusion:

*Collectively, the data and observations suggest natural gas has pervaded an extensive subsurface area beyond the area where elevated ground level methane was found during this survey effort. If that is correct, then more surface emissions should be expected. The issues and concerns presented in this report require more thorough investigation for confirmation and quantification.*⁶

A study from natural gas extraction sites in Colorado⁷ and theoretical work including transmission leaks done at Cornell⁸ underscore the need to consider this variable when setting targets for GHG emissions. Among other studies to consider is research of a scientist at the National Center for Oceanographic Research⁹ and scenarios based on models the *Climate Change Journal*¹⁰. Even *Time* ran an interesting article on April 12, 2012 entitled “Natural Gas and the Invisible Spill: How Much Methane is Reaching the Atmosphere?”¹¹

It is fortunate that the EPA has already established standards for mercury, arsenic, soot and other pollutants. However, the need for similar limits for carbon pollution is essential for safeguarding public health. Carbon pollution and its interaction with other chemicals in our atmosphere exacerbate poor air quality¹² Such hazards weigh most heavily on the most vulnerable member of our society – our children, older adults, those with serious health conditions and the economically disadvantaged. We cannot afford to risk these individuals and our security as a nation. Based on the 2013 *State of the Air* findings¹³, Pennsylvania has the dubious distinction of having five municipal regions on the list of twenty-five of the most polluted cities – some for more than one reason.

As you read and reflect on past and emerging studies, the League encourages you to attend to broad-based, real and projected estimates of the scientific community. It is vital that both the assets and liabilities of natural gas development are considered in implementing your GHG emissions plan. As guardians of public health and safety, we urge you to balance short-term economic gains with long-term consequences.

Thank you.

⁵ <http://epa.gov/climatechange/ghgemissions/gases/ch4.html>

⁶ *Final Report to the Clean Air Council on field inspection and methane sampling survey of Leroy Township, Bradford County, Pennsylvania, June 8th, 2012 performed by Gas Safety, Inc.*

http://www.cleanair.org/program/outdoor_air_pollution/marcellus_shale/methane_sampling_report_leroy_township_bradford_county

⁷ *Evidence of Emissions from Oil and Gas Drilling Operations in Northeastern Colorado*

<http://www.esrl.noaa.gov/gmd/annualconference/previous/2011/slides/44-110414-A.pdf>

⁸ *Assessing the Greenhouse Impact of Natural Gas*

http://www.geo.cornell.edu/eas/PeoplePlaces/Faculty/cathles/Natural_Gas/Assessing_the_greenhouse_impact_of_natural_gas_FINAL_UNFORMTTED.pdf

⁹ Wigley, T. (2011). Coal to gas: the influence of methane leakage Climatic Change DOI: 10.1007/s10584-011-0217-3

¹⁰ [http://link.springer.com/search?facet-author="Larry+W.+Horowitz"](http://link.springer.com/search?facet-author=)

¹¹ <http://www.time.com/time/health/article/0,8599,2111562,00.html>

¹² <http://www.stateoftheair.org/>

¹³ <http://www.stateoftheair.org/2013/city-rankings/most-polluted-cities.html>

