

Public Hearing on state-specific mercury reduction rule

July 25, 2006 1:00 pm

DEP SW Regional Office, 400 Waterfront Dr. (Washington's Landing)

My name is Barbara Grover and I have lived in Pittsburgh since 1989. I am speaking here today because I am most concerned about the level of mercury pollution emitted by our coal fired plants. These emissions negatively impact the health of me, my friends, my children and grandchildren and all the citizens of this state. Pennsylvania ranks SECOND in the nation for the most mercury emitted by electric utilities and generates about 56% of its electricity from coal, mostly from bituminous coal. Out of the 34 coal fired power plants in PA, Western Pennsylvania has the 5 plants that emit the greatest amount of mercury pollution in the state – the plants located in Shelocta, Shippingport, Shawville, Homer City and New Florence.¹ This pollution is especially hazardous to women of child bearing age and children.

I am here to support the regulations proposed by the Pennsylvania Department of Environmental Protection. The DEP recommends that Pennsylvania implement an 80% reduction in Mercury emissions by 2010 and a 90% reduction by 2015.

I am opposed to HB 2610 and SB 1201 which recommend we follow the federal guidelines of a 70% reduction from 1999 levels by 2018 through a two phase program starting in 2010². That means reduction would NOT begin until 2010 and a 20% less reduction is achieved three years LATER than the DEP recommendation. To me, these delays and lower rate of reduced emissions are unacceptable. One of the most remarkable pieces of information I learned about mercury pollution was that it is categorized as a Stock Pollutant. This classification indicates that mercury has the following characteristics:

1. it accumulates in the environment;
2. there is NO natural process that removes or transforms it; and
3. when it gets into the water, the water cannot cleanse itself of it.³

¹ National Wildlife Federation. October 2004. *State Profile: Pennsylvania*. pp. 22-24.

² General Assembly of Pennsylvania. House Bill #2610.

³ Tietenberg, Tom. (2006). *Environmental and Natural Resource Economics* (7th Ed.). Pearson Education, Inc., Addison Wesley, Boston, MA. p. 452.

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This means WE, the human beings that live on this planet and in this state, have to reduce the emissions. Nature is NOT going to do it for us. Mercury maims and kills! The mercury accumulates in plankton and the fish that eat the plankton and the larger fish that eat the smaller fish. In Japan 52 people died and 150 others suffered severe brain and nerve damage because they ate mercury contaminated fish three times a day.⁴ Opponents of my position might say, "Well, no one in Pennsylvania eats fish 3 times a day, so what's the problem?" Maybe no one does but what about those people who eat fish 1, 2 or 3 times a week over a long period of time? Remember mercury accumulates. A recent study indicated that 1 in 6 women nationwide has enough mercury in her body to harm a developing baby. This means an estimated 630,000 babies born every year are at risk from the effects of toxic levels of mercury. If the state adopts the House and Senate bill recommendations, we could have 4 more years of current levels of pollution. That means 2.4 million babies can be placed at risk needlessly. This doesn't make sense.

Can we reduce emissions by 90% by 2015? The answer is a resounding YES. And the cost to accomplish this is quite reasonable. Let me elaborate.

An article published in *Modern Power Systems* in March 2003 described a study about the effectiveness of different types of equipment that remove mercury from coal.⁵ The researchers concluded that the activated carbon injection with a fabric filter achieved a 90% removal of mercury in coal-fired plants using bituminous and subbituminous coal. They also stated that the carbon injection and fabric filter were easily retrofittable with little or no downtime.

In October 2004, the National Wildlife Federation reported the cost of achieving a 90% reduction in mercury emissions for Pennsylvania coal fired plants at less than a quarter of a cent per kilowatt hour or a total of \$223 million.⁶ The report estimated an increase in average monthly residential electric bills at \$1.08 per month or about \$13 per year based on an average monthly residential bill of about \$80. Commercial costs on average would increase about \$6.50 per month and Industrial costs about \$110 per month. These are increases of a bit less than 1.5%. These costs are not exorbitant for the consumer or the industries.

⁴ Tietenberg, Tom, (2006) *Environmental and natural resource economics (7th Ed.)*. Pearson Education, Inc., P. 452

⁵ Lindau, L., Durham, M. Bustard, J., and Martin, C. (2003). *Mercury: myths and realities*. *Modern Power Systems*. March 2003. pp. 30-32.

⁶ National Wildlife Federation. (October 2004). *State Profile: Pennsylvania*. p. 24.

HB 2610 and SB1201 state the implementation of the DEP recommendations “could impair competitiveness of businesses and industries in this commonwealth, producing an adverse impact on employment, coal production, economic development and family income while having negligible beneficial effect on the environment.”

I would be very interested to know what evidence supports this statement. An Environmental Protection Agency commissioned report included evidence quite to the contrary. This EPA commissioned study released in February 2006 by the Harvard Center for Risk Analysis estimated there could be \$5 billion a year in public health benefits nationwide from a 62.5% cut in mercury released by power plants.⁷ If we arbitrarily assume that all of the lower 48 states would benefit equally, then 1/48 of \$5 billion is a bit more than \$104 million benefit to Pennsylvania. This EPA study also estimated that the Southeast US could reap between \$600 million and \$2 billion a year in benefits from reducing mercury pollution. Although Pennsylvania is not in the Southeast USA, it is reasonable to conclude that the taxpayers of Pennsylvania would benefit significantly from a reduction in mercury pollution.

I have two final points to make. The first is related to the ‘hot spot’ characteristic of mercury pollution. Hot Spot means the closer you are to a mercury polluting plant the greater the contamination. This “hot spot” issue is related to another point in the legislative bills. The bills indicate that a trading program is a good way to reduce mercury emissions. The bills state that one of the purposes of the act is “to provide the citizens of this Commonwealth with the opportunity to participate in a national emissions trading program for mercury which is similar to the cost-effective national acid rain control program.” A trading program is NOT effective for Mercury pollution. Mercury is different from acid rain. We can identify the major sources of the pollution – namely coal-fired plants-- and we know the people living near those sources are more at risk than those farther away. A national trading program could allow plants in Pennsylvania to continue to pollute while those in other states reduce their pollution. This makes no sense. ALL the plants in Pennsylvania must reduce their pollution so that our own citizens are protected and so our state health care systems benefit from the reduction in health related problems.

Finally, the House and Senate bills include the provision that prevents the Environmental Quality Board from having the power to make regulations to control mercury emissions from coal-fired plants more stringent than those of the Federal government. This also does not make sense to me. Why shouldn't

⁷Heilprin, John. (April 29, 2006). *EPA Releases Mercury Pollution*. Bio-Probe News.

our state government agency have the power to protect the health and welfare of its citizens when it deems that the federal regulations are inadequate or insufficient? I believe that's exactly the power our state Environmental Quality Board should have. I like the idea that Pennsylvania can be a leader in this area of pollution control.

As you all know, we have been advised to limit the amount of fish we eat from Pennsylvania waterways because of the danger of mercury contamination. Certainly a caution we should all follow. BUT the DEP has made a recommendation that can change the situation so that in the near future our children and grandchildren can enjoy fishing in our rivers and streams and eat their catch as often as they wish!

I strongly urge the Environmental Quality Board to approve the DEP recommendations. These are the standards that will protect the health of our citizens and benefit our state.

Thank you for your time and attention.