




417 Walnut Street  
Harrisburg, PA 17101-1902  
717 255-3252 / 800 225-7224  
FAX 717 255-3298  
<http://www.pachamber.org>

TO: All Members of the Pennsylvania General Assembly

FROM: Gene Barr, V. P. of Regulatory Affairs 

DATE: February 21, 2006

RE: Mercury Emissions

In recent weeks, various environmental activist groups have sent communications to the legislature commenting on the issue of mercury emissions. Their letters have purported to show that the consumption of fish presents an imminent and urgent health hazard to Pennsylvanians because of the mercury levels in those fish. We believe it is important to correct the numerous misleading and incorrect statements in those communications and inform you of a number of key facts that were omitted.

Mercury emissions from U. S. power plants have declined over the years and currently account for just one to two percent of total worldwide mercury emissions. In 2005, the U. S. became the first country in the world to regulate mercury emissions from power plants. Under the federal Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR), power plants in the U. S. will continue to cut their mercury emissions by 64 percent by 2010 and plants here in Pennsylvania will reduce their emissions by 86 percent by 2018. The Pennsylvania Chamber of Business and Industry and its members support implementation of this 86 percent reduction and the “cap and trade” provisions of the CAIR and CAMR programs.

Approximately 50 percent of worldwide mercury emissions are from natural sources (e.g., volcanoes, geysers, fissures in the ocean floor, etc.). The combustion of coal also contains trace elements of mercury. When a certain form of mercury gets into water bodies it can be converted into methyl mercury and enter the aquatic food chain, where it bio-accumulates in fish tissue. We know that mercury, at levels much higher than that at which Americans are currently exposed, can cause health problems and developmental

disorders. We also know that the consumption of fish has been identified as the primary pathway by which mercury enters our bloodstream.

**However, it is critical to note that there are no confirmed cases in biomedical literature of a single person in the U. S. having a level of mercury in their blood due to fish consumption that comes anywhere near a level which would cause adverse health effects.** Therefore, activist organizations which state that in the U. S., “over half a million babies are born each year with mercury poisoning,” are alarmist, irresponsible and simply wrong. If that statement were factual, it would mean that approximately 19,000 babies would be born in Pennsylvania in this condition. Research shows that out of 6 million hospitalizations in Pennsylvania for the period 2002-04, there were just eight hospitalizations for mercury poisoning. Most of these were self-inflicted (i.e., drug overdoses) and none were related to poisoning from eating fish. In fact, according to the most recent study from the Centers for Disease Control (CDC), no man, woman or child in the U. S. had blood levels above what is called the “benchmark dose.” The CDC further stated that “finding a measurable level of mercury in the blood does not mean that the level of mercury causes a health effect.”

The “benchmark dose” is 58 parts per billion in the blood, and is the lowest level at which subtle human health effects can be noted. In order to create an additional margin of safety, the U. S. Environmental Protection Agency (EPA) also established a “reference dose,” which is 5.8 parts per billion in the blood, a number ten times or 1000 percent more stringent than the benchmark dose. In the recent CDC study, 5.7 percent of women of child-bearing age had blood levels slightly above the reference dose but still well below the level where even subtle health effects are observed. The establishment of the reference dose is analogous to the legislature stating that “65 miles per hour is a safe speed to travel on interstate highways, but just to be absolutely sure, we’ll make the limit 6.5 miles per hour.” No one is likely to believe, in that situation, that someone traveling at 7 or 8 miles per hour is driving at an unsafe speed or is “at risk” since they are still protected by a safety factor of eight or nine. However, environmental activists are claiming that 600,000 children are at risk because 5.7 percent of women of childbearing age are protected with a safety factor of less than ten.

The U. S. Food and Drug Administration (FDA) has commented on this issue by stating, “92 percent of women of child-bearing age already consume below the EPA’s reference dose, while the top 8 percent still have a safety margin of about eight-fold.” Another recent study, this by the former surgeon general of the U. S. Navy, Dr. Harold Koenig, Vice Admiral (Retired), found that “no U. S. women or children are being exposed to unsafe levels of mercury through fish consumption.”

Despite this evidence, various environmental activist groups continue to ask for state-specific mercury controls beyond the 86 percent reduction that will be required by federal law. Members of these groups, who routinely omit any mention of federal controls, have attacked members of this legislature for opposing a state-specific plan, and made it appear as though these legislators, and others skeptical about the benefit of such a state regulation, oppose all mercury controls. This is patently untrue. As noted above, many

of these groups have also twisted and distorted the scientific and health information on mercury. In fact, wrongly scaring consumers away from all fish consumption creates a health problem in its own right, given that the U. S. FDA, the American Heart Association, and other health professionals agree that fish consumption is an important part of a healthy diet.

Activist groups have asked for an acceleration of the federal law, as well as an increase in the reduction level – from 86 percent to 90 percent or greater. However, both the U. S. Department of Energy and the U. S. EPA state there are no commercially available technologies that can consistently attain this 90 percent level at every power plant in the U. S. The Energy Information Administration estimates that even attempting to reach this level would cost U. S. utilities and their customers up to \$358 billion. Under CAIR and CAMR, the power industry and its consumers will still pay as much as \$750 million to fully implement those regulations, and EPA estimates the annual health benefits of these programs at \$200,000 to \$3 million per year through 2020.

As previously mentioned in this letter, the PA Chamber and its member companies, which include both energy generators and consumers, supports the 86 percent reduction in mercury emissions required by CAIR and CAMR. However, we question the value of significantly increased expenditures for very small incremental decreases in mercury emissions beyond what the federal rule produces. Unless real, quantifiable health benefits to Pennsylvania citizens can be reasonably expected, placing additional economic burdens on Pennsylvania's power producers and consumers is not sound public policy.

A state-specific plan would simply cause higher energy costs for energy producers and consumers, and in this de-regulated electricity environment, cause Pennsylvania producers to compete against states without similar cost burdens and ultimately, threaten PA jobs. It is for these reasons that the International Brotherhood of Electrical Workers and the United Mine Workers have expressed strong concerns about a state-specific proposal and are in support of requirements to reduce emissions by 86 percent with the "cap and trade" provisions.

The issue of mercury emissions is an important public policy issue. Statements by activist groups that misrepresent the issue and cloud the debate and hinder the goal of devising sound public policy. As U. S. Senator Daniel Patrick Moynihan said, "Everyone is entitled to his own opinion. He is not entitled to his own facts."

We look forward to working with the legislature to implement a mercury control plan that adequately protects human health and the environment while avoiding a regulatory approach that threatens Pennsylvania's economic vitality.