

June 5, 2006

Dear [LEGISLATOR]:

As organizations and individuals representing medical, nursing and public health professionals, and health-affected groups, we are concerned that Pennsylvanians are not adequately protected from exposure to mercury in our environment. We call for immediate action to protect the general public and vulnerable populations such as pregnant women and children.

**Specifically, we support a strong, Pennsylvania-specific regulation that reduces mercury emissions from coal-fired power plants in the Commonwealth, achieving 90 percent reduction in mercury pollution by 2015.** The Pennsylvania Environmental Quality Board voted 17-3 on May 17 to move ahead with the draft rule from the Department of Environmental Protection (DEP), giving the public an opportunity to voice their support for this critical regulation. **We are also opposed to legislative attempts to block the DEP rule** and that force Pennsylvanians to rely instead on an ineffective and dangerous federal rule (Clean Air Mercury Rule), which could delay mercury reductions for many years. We urge you to vote against HB 2610 and SB 1201.

*Mercury threatens our health and the healthy development of our children.* Scientific findings overwhelmingly indicate that mercury is a significant threat to the fetus, infants, and young children. Exposure to methylmercury poses risks to adults including reproductive problems<sup>i</sup> and damage to organ systems, including the cardiovascular system<sup>ii,iii</sup> and, in particular, the brain and central nervous system.<sup>iv</sup>

We are all vulnerable, but **babies are at the greatest risk**, because the developing brain is much more susceptible to methylmercury exposure than is the adult brain, and is most sensitive while *in utero*.<sup>v</sup> Methylmercury crosses the placenta easily and readily penetrates the fetal brain.<sup>vi</sup> Even low to moderate levels of mercury exposure before birth can result in a host of developmental problems including delayed walking, delayed speech, and decreased performance on tests of attention, fine motor function, language, visual-spatial abilities, and memory.<sup>vii,viii,ix</sup> In instances where a developing fetus is exposed to high doses of methylmercury, the results include low birth weight, small head circumference, severe mental retardation, cerebral palsy, deafness, blindness, and seizures.<sup>x</sup>

*Pennsylvanians are exposed to methylmercury at unacceptable levels.* Inorganic mercury released from various industrial sources eventually deposits in water bodies, where it is converted to methylmercury through microbial action and accumulates in many edible fish species, including Pennsylvania's sport fishes. Coal-fired power plants in Pennsylvania emit over 80 percent of the mercury pollution released to the air in the Commonwealth. Most human exposure to methylmercury comes through contaminated fish. Virtually all freshwater and ocean fish and shellfish are contaminated to varying degrees, and the range of methylmercury levels commonly found in these foods include some that pose a health risk to the public.<sup>xi</sup>

The Centers for Disease Control and Prevention (CDC) found in January 2003 that nearly eight percent of women of child bearing ages (16 to 49) are exposed to levels of mercury that exceed the limit established by the Environmental Protection Agency (EPA) that is considered safe for a fetus.<sup>xii</sup> A more recent analysis by EPA scientists raised that estimate to more than 15 percent of women, based on peer-reviewed studies showing that cord blood concentrates mercury at significantly higher levels than maternal blood.<sup>xiii</sup> Using 2000 census figures to extrapolate across the entire U.S. population, this could mean that **as many as 630,000 newborns each year are at risk of serious congenital neurological and developmental impairment.**

*Pennsylvanians need protection from mercury pollution in the Commonwealth.* Available data suggest that human activities have increased levels of mercury in the atmosphere by roughly a factor of 3, average

deposition rates by a factor of 1.5 to 3, and deposition near industrial areas by a factor of 2 to 10.<sup>xiv</sup> While mercury emissions from various sources may be transported long distances in the atmosphere, local mercury sources play an important role in local pollution. Draft EPA modeling indicates that at mercury “hotspots” within the United States (locations where mercury deposition is highest), local emission sources within a state can be the dominant source of deposition. In addition, a recent 10-year study by the state of Florida points to the importance of local mercury pollution sources and the feasibility of measures to protect public health. In that study, strict emission limits applied to incinerators in south Florida were found to produce emissions reductions of 99% and corresponding reductions in mercury levels in Everglades fish and wildlife of 60%.<sup>xv</sup> Results from a two-year, U.S. EPA-funded study examining mercury deposition in Steubenville, Ohio released earlier this year found that up to 67 percent of the mercury collected at an Ohio River Valley monitoring site originated from nearby coal-burning industrial plants.<sup>xvi</sup>

The federal Clean Air Mercury Rule (CAMR) has been widely criticized by government agencies. Fourteen states (including Pennsylvania) together with a number of environmental organizations and Indian Tribes have filed suit, alleging that the rule fails to treat mercury as a hazardous air pollutant as required. The Congressional Research Service concluded, “due to emissions banking and trading, the full 70% reduction might not be achieved until 2030. The agency projects actual mercury reductions of 35% by 2010, and about 50% by 2020.”<sup>xvii</sup>

Pennsylvania’s Fish and Boat Commission recognizes the problem posed by mercury in waters of the Commonwealth, and has issued consumption advisories to help minimize the public’s exposure to methylmercury-contaminated fish. These advisories have been strengthened within the past year in many areas, further limiting fish consumption due to increased mercury concentrations in fish in those areas.

In light of the serious public health threat posed by exposure to methylmercury, especially to the most vulnerable segments of our population—developing and nursing babies and the very young— and **acknowledging the scientific consensus which supports *major* reductions in mercury emissions from the electric utility industry as soon as possible**, we urge your opposition to HB 2610 and SB 1201, and your support for the DEP Pennsylvania Mercury Rule.

Sincerely,

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