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Testimony of Lynn C. Jaeger Before the Pennsylvania Department of Environmental Protection 2 M 10:05 Southeast Regional Office, Norristown, PA Thursday, July 27, 2006

Thank you. I am appreciative of this opportunity to express my concerns before you.

We are here today because the Commonwealth of Pennsylvania has a problem. The problem is that we have polluted our environment so badly that we are endangering the health and safety of those now living, and of those who will live here in future generations. We have done this in myriad ways, creating many complex difficulties, but today we are here to focus on the problem of mercury pollution.

Mercury is a heavy metal, toxic in all its forms. It enters the environment primarily through industrial discharges: into the soil, a body of water, or into the air (from which it falls into both soil and water). Once present it remains – it does not biodegrade. Removal is extremely complicated and costly, being most practical when the pollution is localized rather than widespread.

Mercury is not excreted once it enters the body, and in animals, it accumulates in fatty tissues. Because of this it moves up the food chain – polluted water and soil cause it to be taken up into plants, herbivores eat the polluted plants, developing even higher levels of mercury in their tissues, and finally, when herbivores are consumed by predator species, their levels of mercury become highest of all. A well known source of such gathered mercury in the American diet is tuna fish – when mercury falls on the ocean it enters plankton, plankton is eaten by tiny fish, who are eaten by larger fish, and finally the tuna fish eat the larger fish, accumulating in their tissues all of the mercury that was present in the plankton, the tiny fish, and their prey.

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Mercury contamination of tuna has been known to be a problem for several decades, as airborne pollution, direct discharge of mercury-tainted wastes, runoff from coastal areas, and the contribution of rivers (concentrated in much the same way as in fish: mercury from creeks feeds into streams, and then from streams into rivers) has continued. Standards have been set for allowable amounts of mercury in tuna fish sold by American companies that are significantly lower than what is found in much tuna caught and sold by foreign packers, yet Federal government recommends that its consumption by pregnant and nursing women and growing children, be limited to no more than one serving per week. Many health officials believe that NO exposure to mercury is safe. This is because mercury causes irreversible damage to the nervous system, particularly when it is rapidly developing. While all can be adversely affected, those most vulnerable are the unborn and our children. *Similarly, we have been given warnings by our state's health authorities to avoid, or to greatly limit, our consumption of fish caught anywhere in Pennsylvania, because the entire state has been subject to the deposit of mercury and other heavy metals from various industrial sources.* 

Approximately 40% of mercury pollution across the country has its origins in the burning of coal to generate electricity. It is released into the air from power plants, and finds its way into all parts of the environment. People and animals breather it, plants take it in from the soil, and when it falls into water it makes its way up the food chain as I have described. Ultimately it accumulates in those animals, including people, at the top of the food chain.

Here in Pennsylvania we rely on coal-powered plants for a large part of our electricity. It is forecast that we will need to become more reliant on coal as other energy sources dwindle. Right now, our power plants are not equipped to remove much mercury from their smokestacks before it is released into the environment; there is only one state in the entire country whose mercury emissions from power plants is worse. This bodes ill for environmental, health AND budgetary integrity in our state. If mercury emissions continue as they are the costs of removing mercury from our waterways alone would be astronomic. The costs of the physical and mental health problems resulting from chronic heavy metal exposure is also high, not only directly, in terms of costly medical treatment and lost economic productivity, but in the suffering of those whose life potential is reduced. Obviously, the less mercury emitted, the less expensive it will be to clean things up, and the fewer adverse effects on our population.

Fortunately, this is a problem that can be solved. There are now means of efficiently catching and containing mercury produced as a byproduct of electricity generation *before* it can pollute the air we breathe, the water we drink, and the food we eat. If those means are employed NOW we can reduce current emissions and focus our limited financial resources on remedial actions to protect the health and welfare of our population.

The Federal government has regulations that limit mercury emissions from power plants, but unlike those set by the FDA for tuna fish, they do not require the use of the most current and efficient technology. This means they would allow more mercury to be released into the atmosphere than must be to operate coal-fired power plants. Believing that this is not good enough for Pennsylvanians, our governor, and the state Department of Environmental Protection have put forth a plan to reduce mercury emissions by 90%, while still allowing the owners of electric generating plants to operate and make a profit.

There is enormous support for this plan – Eight out of 10 Pennsylvanians polled thought it was a good idea to contain the mercury at its source rather than to have to clean it up once it has been spread throughout the state, especially as the cost would amount to little over a dollar a month more on the average household's electric bill. The DEP did its homework in preparing the plan, seeking information and input from a wide range of sources. Health professionals have testified to the benefits of preventing mercury-related disorders, and to the costs of treating them when they occur. Industry and utility companies gave input, as did environmental scientists.

But when it made its way to the legislature for approval, some of our state Representatives and Senators sought to block its implementation, barring our own Department of Environmental Protection from setting any standards that would exceed those of the Federal government, even though it is not only *possible* to reduce emissions to 10% of what they are now, but it is so demonstrably cost-effective to prevent as much mercury pollution as we can.

This is unacceptable. We hire the people working in our state regulatory departments to protect us. They should be allowed to do so. We should be thinking about the common good; not only in terms of greater profits for companies, but in terms of the health and welfare of ALL Pennsylvanians, in this current generation and those to come. We have a responsibility to do everything we can to limit the exposure of unborn babies, infants and children to a toxin that robs them of intellectual and physical abilities.

Please, don't let us be exposed to more mercury than is absolutely necessary. We simply cannot afford it.

Thank you for this opportunity to be heard.

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