Testimony of Nicholas DiPasquale, Deputy Secretary of the Pennsylvania Department of Environmental Protection
On Behalf of the
Commonwealth of Pennsylvania

Before the U.S. Environmental Protection Agency
On the proposed Utility Mercury Reductions and Interstate Air Quality Rules
Philadelphia, Pennsylvania
February 25, 2003

Good morning, I am Nicholas DiPasquale, Deputy Secretary for Air, Recycling and Radiation Protection for the Pennsylvania Department of Environmental Protection. On behalf of Governor Rendell and Secretary Kathleen McGinty, I would like to take this opportunity to thank EPA for holding public hearings in Philadelphia on the proposed Utility Mercury Reductions and Interstate Air Quality Rules published in the Federal Register on January 30, 2004. In addition, I want to welcome stakeholders including regulators, environmental groups and industry to the hearings today and tomorrow. We hope you find time after the hearings to get out and enjoy the Cradle of Democracy and City of Brotherly Love.

Today, I am speaking on behalf of the Commonwealth of Pennsylvania regarding EPA's proposed Mercury Reductions and Interstate Air Quality Rule (IAQR) rules. I have worked in the environmental field for over 20 years collaborating with EPA and the states on a wide variety of air, water and waste management issues. I currently serve as Pennsylvania's representative on the Quicksilver Caucus, which is composed of several members of the Environmental Council of States and representatives of various national media associations.

My testimony today will highlight the written comments on the proposed rules that the Commonwealth of Pennsylvania will be submitting to EPA on or before March 30, 2004. Pennsylvania is very concerned with the direction that EPA is taking on two very

important air quality issues that will define the impact of emissions of mercury and fine particulate on the citizens of the Commonwealth of Pennsylvania and the nation as a whole for the coming 20 years.

Pennsylvania lauds EPA's December 2000 findings and conclusions that it is "necessary and appropriate" to regulate mercury emissions from electric utility steam generating units as hazardous air pollutants (HAPs). It is well documented that mercury is a persistent toxic bio-accumulative pollutant. There is extensive scientific data that substantiates the adverse effects of methylmercury on the development of the brain in humans and animals. These adverse effects can include mental retardation, cerebral palsy, deafness, blindness and certain speech disorders. According to EPA's own scientists, more than one child in six born in the United States could be at risk for developmental disorders as a result of mercury exposure in the mother's womb. This finding is double EPA's previous estimates--630,000 of the 4 million babies born each year could be at risk of developmental disorders. Mercury deposition to and accumulation in the aquatic ecosystem has resulted in 45 states issuing fish consumption advisories. In short, mercury is a highly toxic pollutant – one specifically targeted by Congress when it amended Section 112 of the federal Clean Air Act in 1990. The environmental impacts of mercury are significant, widespread and adverse. We believe Congress clearly intended for maximum achievable technology to be installed on major stationary sources of mercury including electric utility units.

Pennsylvania is very concerned that EPA is now proposing to revise its December 2000 finding that it is "appropriate and necessary" to regulate electric utility units' hazardous air emissions using the Maximum Achievable Control Technology or MACT standards under Section 112 of the Clean Air Act. EPA is now proposing to use Section 111 of the Clean Air Act as the statutory basis for establishing mercury control for new and existing electric utility units. This current proposal will utilize a cap-and-trade program as the means to achieve what is characterized as a higher level of control of mercury, but over a much longer timeframe than available through MACT standards that require compliance within 3 years after the effective date of the final rule. Mercury is a neurotoxin that

should continue to be regulated as a hazardous air pollutant because of the significant adverse impacts on public health and the environment. Section 111 of the Clean Air Act should not be substituted for the MACT control that would be achieved under Section 112 of the Act. Our position is supported by language on page 79830 of EPA's Federal Register Preamble published on December 20, 2000 stating that, and I quote:

> "It is necessary to regulate HAP emissions from coal and oil-fired electric utility steam generating units under Section 112 of the Clean Air Act because the implementation of other requirements under the Clean Air Act will not adequately address the serious public health and environmental hazards arising such emissions identified in the utility RTC [Report to Congress] and confirmed by the NAS [National Academy of Science] study." Close quote.

There has been no change in circumstances to warrant a reversal of EPA's December 2000 finding that it is "necessary and appropriate" to regulate mercury as a hazardous air pollutant under Section 112 of the Clean Air Act.

EPA's Proposed Utility MACT

EPA's proposed mercury MACT rule would require utilities to install controls known as "maximum achievable control technologies" or MACT standards under Section 112 of the Clean Air Act and, as proposed, would reduce nationwide mercury emissions by 14 tons or 29 percent by the end of 2007. EPA's methodology for establishing the MACT control levels is set forth in a November 26, 2003 memorandum by William H. Maxwell from the Emissions Standards Division of the Office of Air Quality Planning and Standards entitled "Analysis of variability in determining the MACT floor for coal-fired electric utility steam generating units."

Section 112(d) of the Clean Air Act provides the statutory framework for the MACT floor concept for establishing these control levels and an interpretive finding by EPA published in the June 6, 1994 Federal Register to clarify the process. In the June 1994 notice, EPA stated that it, and I quote, "would look at emissions limitations achieved by

each of the best performing 12 percent of existing sources, and average those limitations." Close quote.

Pennsylvania has conducted an in-depth review of EPA's "MACT floor" analysis for the bituminous coal-fired unit subcategory which dominates affected sources in the Commonwealth. We believe that EPA has improperly performed this MACT floor analysis in a manner that significantly under-estimates achievable control levels. Moreover, EPA has not performed the proper analysis on the other utility fuel subcategories. We intend to provide written comments on these MACT analyses.

Based on our analysis, EPA has not sufficiently justified its adjustment to the calculated MACT "mean" value to increase the standard to a less stringent 97.5 percent upper confidence level. However, our main concern is the methodology that EPA used to establish the "mean" value from the available data. EPA calculated the MACT control level such that 97.5 percent of the individual data points from each of the top performing 12% of the controlled sources would be in compliance. EPA's methodology would be appropriate if the standard were to be based on compliance for each individual measurement, but the proposed standard is a 12-month rolling average. With a year's timeframe to average individual measurements, it is inappropriate to accommodate compliance levels for individual values.

We have recalculated a MACT floor using an arithmetic average of the data for each of the four facilities sampled by EPA; and then established an average from these four values, which was adjusted as done by EPA for an upper confidence level of 97.5%. Pennsylvania's MACT floor analysis for bituminous coal-fired utility boilers would establish a MACT control level of 0.67 pounds of mercury per trillion BTUs of heat input. EPA's calculated value is 2.0 pounds of mercury per trillion BTUs of heat input, which is three times higher than the control level calculated by Pennsylvania, which is supported by the available source-specific data. Corrections to the MACT floor calculation methodology will also affect the other fuel subcategories. We will submit a recalculation for each of these subcategories prior to the close of the written comment

period. I would like to point out that at the MACT levels proposed by EPA, less than 27% of the other fuel category units would require any additional mercury control as reported by EPA's own consultant, RTI International. This is unacceptable public policy given the highly toxic and insidious nature of mercury.

With regard to EPA's proposal to regulate mercury emissions from the electric utility units under Section 111 of the Clean Air Act and utilize cap-and-trade programs, we understand that EPA would allocate to each state specified amounts of emission "allowances" for mercury. This market-based approach would inappropriately allow mercury hot spots to remain, will actually delay mercury reductions due to banking and trading, and as proposed does not reduce mercury emissions to the level achievable under a stringent MACT analysis. If EPA adopts the Section 111 alternative, mercury emissions would be reduced by 33 tons or 69 percent in 2018. Because of the toxicological effects of methylmercury on humans and wildlife, a 2018 final compliance date is not justified. In October 2003, the Northeast States for Coordinated Air Use Management (NESCAUM) concluded in its report entitled Mercury Emissions from Coal Fired Power Plants, The Case for Regulatory Action "that mercury control efficiency of over 90 % is feasible for power plants."

Pennsylvania is also very concerned with EPA's approach to utility mercury control in that it will significantly delay the control of utility mercury and also that a "cap and trade" approach will create "hot spots" of mercury exposure that could be very detrimental to the citizens and resources of the Commonwealth. A recent Florida Everglade Study indicates that mercury concentrations found in fish and wading birds in the Everglades have dropped by 60 to 70 percent due to local mercury emission reduction efforts. This illustrates the point that despite the fact that there are global mercury transportation issues, local emission reduction efforts are very significant to the local air quality and environmental impacts. Pennsylvania does not support a market-based approach for mercury control programs.

We urge EPA to develop and promulgate more stringent mercury emission reduction performance standards than have been proposed and to promulgate MACT regulations because it continues to be "necessary and appropriate" to regulate mercury emissions from utility units under Section 112 of Clean Air Act to protect public health and the environment including air and water resources. We believe there is no scientific justification for EPA to reverse its December 2000 finding that mercury emissions from electric utility generating stations should be regulated as HAPs and subject to the mandated maximum achievable control technology requirements. Hence, we believe that it is not appropriate or justifiable to establish mercury emission standards for utility units under Section 111 of the Clean Air Act.

Interstate Air Quality Rule

In the interest of time, I would like to offer a few comments on EPA's proposed Interstate Air Quality Rule. As you know, Pennsylvania has been very active in interstate air quality issues. Pennsylvania co-chaired, with New Jersey, the development of the Ozone Transport Commissions NO_x cap and trade program. Pennsylvania chaired the Ozone Transport Assessment Group's trading workgroup. And Pennsylvania submitted a Petition under Section 126 of the Clean Air Act that was approved and resulted in the EPA NO_x SIP Call.

We have several comments on the Interstate Air Quality Rule or IAQR. Pennsylvania endorses the comments submitted by the Ozone Transport Commission. These comments list a number of concerns that the states in the Ozone Transport Region have with the IAQR. The most important concern with the IAQR is that the reductions do not come soon enough. Compliance with the proposed emission caps is not required until after the 8-hour ozone and the PM2.5 attainment dates and therefore cannot be relied upon for control measures to meet these ambient standards.

Pennsylvania and other states will be required by the EPA's ozone and $PM_{2.5}$ implementation rules to demonstrate compliance with the new health-based standards. We have implemented all of the reasonably available control measures to achieve and

maintain the 1-hour ozone standard and are now adopting high removal cost regulations for emissions from small sources. EPA's modeling shows that, even with draconian measures applied locally, large areas will still not meet the health-based standards. The emission reductions from the electric generating units can be achieved on a time-schedule much faster than proposed by EPA. These significant emission reductions would go a long way to assist Pennsylvania and other states in meeting the new requirements for the health-based 8-hour ozone and fine particulate standards by the prescribed attainment deadlines. To the extent that upwind parts of the country are not held accountable, we continue to experience unhealthy air quality from a failure to act, to be competitively disadvantaged in energy and electricity pricing and to have a virtually impossible task of attaining air quality within the time frames mandated by federal law.

The member states of the Ozone Transport Commission, who have extensive experience with electric generating unit emission control programs and have successfully implemented programs advancing the state of the art of control, recently developed and recommended a set of multi-pollutant goals that are feasible and cost-effective and that can meet the new health-based standards in all nonattainment areas within the timeframes required by the Clean Air Act. We encourage EPA to review and consider the Ozone Transport Commission’s multi-pollutant strategy position.

Pennsylvania is concerned that EPA has proposed emission budgets for electric generating units that do not anticipate technological advances that would be expected over the next 20 years. The proposed emissions budgets are locking in emission levels based on existing control technology, efficiency gains and advancements in electric generation technologies. The basic formula proposed by EPA for a cap and trade rule is similar to the existing 22 state NOx State Implementation Plan call program and only serves to preserve the status quo. These proposed rules also fail to anticipate and promote renewable energy technologies that are desperately needed to reduce reliance on foreign energy supplies and minimize greenhouse gases.

EPA has implemented the NO_x SIP Call, despite having faced significant legal hurdles. One of the major issues was the growth factors used to establish state budgets. Pennsylvania strongly encourages EPA to establish budgets without growth factors to demonstrate emission reductions from today's emission levels and not a hypothetical future emission level. Such a program would encourage innovation by the states in improving electric production efficiency rates and reducing growth in electric demand.

Thank you for this opportunity to present Pennsylvania's perspective on these very important environmental issues that will affect the future of Pennsylvania, the Nation and World. Pennsylvania will be submitting detailed written comments into the docket. We look forward to working with EPA in developing these programs.