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**TESTIMONY OF
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BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE**

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Madame Chairman and members of the Committee, thank you for the opportunity to discuss with you today the important issue of reducing mercury emissions and the public health and environmental risks they pose. In my remarks today, I will review the significant progress EPA and the States have made in requiring substantial reductions in mercury emissions from the U.S. utility sector. I will also describe the related litigation and our work to address the results of that litigation to date. EPA remains committed to achieving mercury emission reductions from the utility sector as provided under the Clean Air Act.

Mercury is a toxic, persistent pollutant that accumulates in the food chain. Fossil fuel-fired utilities are the largest source of human-generated mercury emissions in the U.S. Concentrations of mercury in the air are usually low and of little direct concern. However, atmospheric mercury falls to Earth through rain or snow and enters lakes, rivers and estuaries. Once there, it can transform to its most toxic form, methylmercury, and accumulate in fish and animal tissues. Americans are exposed to mercury primarily by eating contaminated fish. Because the developing fetus is the most sensitive to the toxic effects of mercury, women of childbearing age are regarded as the population of greatest concern. Children who are exposed to low concentrations of methylmercury

prenatally are at increased risk of poor performance on neurobehavioral tasks, such as those measuring attention, fine motor function, language skills, visual, spatial abilities, and verbal memory.

EPA has issued a number of regulations to control emissions of mercury from large sources, including standards for waste combustion, chlor-alkali plants and others.

The Clean Air Mercury Rule

EPA sought to address the consequences of utility mercury emissions through the first-ever federal rule to permanently reduce and cap mercury emissions from coal-fired power plants. Issued on May 18, 2005, the Clean Air Mercury Rule (CAMR) built on EPA's Clean Air Interstate Rule (CAIR) to significantly reduce emissions from coal-fired power plants -- the largest remaining sources of mercury emissions in the country. Upon full implementation, these rules would have reduced utility emissions of mercury from 48 tons a year to 15 tons, a reduction of nearly 70 percent or more than 80 percent of the mercury in coal.

CAMR established standards of performance to limit mercury emissions from new and existing coal-fired power plants. The rule required new plants (under the rule, "new" meant construction starting on or after January 30, 2004) to meet new source performance standards (NSPS) in addition to being subject to the CAMR emission caps. The rule also created an optional market-based multi-State emissions cap-and-trade program to reduce nationwide utility emissions of mercury in two distinct phases. Under the cap-and-trade system, emissions were capped permanently and nationwide --

emissions could only go down. The trading approach provided a continuous incentive for technology innovation and flexibility for compliance by the power sector.

CAMR applied to plants in all 50 States, the District of Columbia, and Tribes, and required each jurisdiction to submit a State Plan (with the exception of the Tribes). This State Plan had to demonstrate that CAMR mercury reduction requirements would be met in that State. CAMR State Plans were due to EPA by November 17, 2006. On December 22, 2006, EPA proposed a Federal Plan as a backstop measure which, if finalized, would have ensured that power plants affected by CAMR reduce their mercury emissions on schedule.

CAMR also included rigorous continuous mercury emissions monitoring provisions. The monitoring methodologies adopted represent the “state-of-the-science,” and were the result of an intensive cooperative effort and consensus among diverse stakeholders including EPA, States, the utility industry, equipment vendors, the Electric Power Research Institute (EPRI), and the National Institute for Standards and Technology (NIST) to advance and upgrade the quality of mercury emissions measurement and monitoring. Numerous field tests and laboratory experiments have been performed to refine and develop these methodologies. In a few short years, this cooperative effort has advanced the state-of-the-science in the measurement of mercury emissions to enable the use of high quality emission monitoring systems that provide continuous hourly mercury emissions measurements.

Currently, EPRI, NIST, and equipment vendors, in collaboration with EPA, are conducting a demonstration program at participating coal-fired utilities to assess the field performance of these new monitors.

In CAMR, EPA offered States considerable program flexibility to meet their assigned mercury budget. Besides the option of joining the EPA-run multi-State emissions trading program, States could have source-specific controls, intrastate trading, or shift from trading to source controls over time. States that wanted to be in the multi-State trading program could decide how to distribute allowances (including auctions) and whether to award all allowances. There were also some core rules for participation in the EPA-run trading program that were intended to prevent companies from having unfair economic advantages and to ensure the program was environmentally effective.

For States that chose not to allow trading, EPA evaluated the plans to ensure they met the basic requirements of CAMR and that they were at least as stringent as EPA's trading program. In practical terms, "at least as stringent" meant the plan ensured that all State electric power plant mercury emissions would remain below the State emissions cap and that those emissions would be measured properly.

Considerable progress was made in implementing CAMR. By February 2008, a total of 34 States had submitted plans for approval, and most of the rest of the required State Plans were in development. EPA believes that all of the State Plans, including those requiring more stringent controls, were developed through a cooperative approach between EPA and the States.

At the same time, the power industry was deploying mercury-specific control technology. According to the National Electric Energy Data System -- which is used for EPA modeling -- at the start of 2008, the power industry already had installed activated carbon injection systems (ACI) for mercury control on more than 2 gigawatts of coal-fired capacity. EPA is expecting the installation of another 2 gigawatts in the next

several months. EPA was expecting the industry to install ACI on an additional 20 gigawatts of capacity by 2012. (Additionally, in response to CAIR, EPA expects that by the end of 2010 over 110 gigawatts of coal-fired capacity will have both scrubbers and selective catalytic reduction controls operating that often achieve high levels of mercury removal while removing sulfur dioxide and nitrogen oxides, respectively.)

During this period also, sources had installed and were testing approximately 200 continuous mercury emissions monitoring systems. Vendors were in the process of shipping another 500 of these monitors.

Court Challenge

On February 8 of this year, a three judge panel of the D.C. Circuit Court of Appeals vacated CAMR and the related Section 112(n) Revision Rule in State of New Jersey v. EPA; then, on March 14, the court issued its mandate which actually caused the vacatur to take effect. In the Section 112(n) Revision Rule, EPA had revised its earlier decision in 2000 to add utilities to the “section 112(c) list,” the list of source categories for which EPA will issue regulations for hazardous air pollutant emissions under section 112. Based on an analysis of mercury emissions and deposition from utilities, and on other requirements of the Act, EPA concluded in 2005 that it was neither appropriate nor necessary to regulate utility mercury emissions under section 112.

In its briefs before the D.C. Circuit, EPA argued that the Clean Air Act treats utilities differently from other source categories of hazardous air pollutants, because section 112 contains a special provision that applies only to utilities. This provision is section 112(n)(1)(A), and it requires EPA to first conduct a scientific study of hazardous

air pollutant emissions from utilities and then to determine, based on the results of that study, whether it is “appropriate” and “necessary” to regulate those emissions under section 112, after accounting for the other requirements of the Clean Air Act. By contrast, other major source categories must be regulated under section 112 solely on the basis of whether the category emits a certain quantity of hazardous air pollutants.

In its February 8 decision, the court disagreed with EPA’s argument, and held that EPA could not remove utilities from the 112(c) list without making the findings that applied to removal of other source categories. For this reason, the court vacated EPA’s Section 112(n) Revision Rule, which had removed utilities from the section 112(c) list. Further, because EPA’s interpretation of the Act is that hazardous air pollutant emissions from a source category regulated under section 112 cannot be regulated under section 111, the court also vacated CAMR which had been promulgated based on section 111 authority. The court did not address any of the litigant’s other challenges concerning CAMR, including the validity of the cap-and-trade program.

While EPA respects the D.C. Circuit’s decision in this matter, we fundamentally disagree with the court’s opinion. Therefore, on March 24, EPA filed a motion for rehearing en banc, asking the full court to reconsider the three-judge panel’s decision. Other parties responded to EPA’s motion, at the court’s request, on April 22. We believe that the panel erred in failing to fully consider the implications of the separate and different provision Congress adopted to govern regulation of power plants. We also felt that it was particularly important to seek rehearing in this case because the panel’s decision has significant and important implications. First, if the court’s decision remains in force it would require EPA to spend considerable time and resources to issue standards

for power plants under section 112 when the Agency has already concluded, through a notice and comment rulemaking, that it is neither appropriate nor necessary to do so. Second, until EPA issues such standards, the decision subjects affected entities to case-by-case standards as a consequence of section 112(g) of the Act. We are now waiting for a decision as to whether the full court will agree to rehear the case.

Clean Air Act Section 112(g)

As a result of the vacatur of the Section 112(n) Revision Rule and the subsequent issuance of the mandate by the Court, the requirements of section 112(g) of the Clean Air Act now apply. Under section 112(g), no person may begin actual construction or reconstruction of a major source of HAP unless the permitting authority determines on a case-by-case basis that new-source Maximum Available Control Technology (MACT) requirements will be met. New-source MACT determinations under section 112(g) shall not be less stringent than the emission control which is achieved in practice by the best-controlled similar source as determined by the permitting authority based on available information. We understand that there are a number of section 112(g) permit applications that are under consideration by State permitting authorities.

Pursuant to the request of the Subcommittee, I would now like to address two pieces of legislation that are the subject of this hearing.

The Mercury Emission Control Act

The Mercury Emission Control Act calls for EPA to propose regulations limiting hazardous air pollutant emissions, including mercury emission reductions of not less than

90 percent, from coal-fired power plants within 180 days of enactment of the bill, but no later than October 1, 2008. The Administration has not taken a formal position on this legislation; however I would like to note at the onset, that October 1, 2008, is now less than 180 days away. While EPA appreciates the basic objective of this bill, with regard to any new requirements under section 112, we would be concerned that 180 days would be an insufficient time period to gather the data, undertake the analysis and prepare a national emission standard for power plants.

Second, the bill assumes that a 90 percent reduction in mercury emissions from coal-fired power plants is feasible by 2010 using current technologies and at a reasonable cost. Those assumptions may not be valid. While there has been technological progress on controlling mercury from power plants since CAMR was promulgated, we have not done the sort of data collection and analysis that would be required to determine what level of emissions reduction is achievable today. Considerably more time would be necessary to thoroughly investigate the current status of such controls for the wide variety of coal ranks utilized in the United States without prejudging the level of control that may be appropriate.

Finally, the legislation dictates that standards be promulgated under section 112. As a matter of policy, we continue to believe that a cap and trade approach is the appropriate mechanism to control mercury emissions. The technology to control mercury emissions specifically from coal-fired electric generation boilers is new, and there are still challenges in applying it to some boilers. A cap and trade approach promotes the application of the controls to units that can provide the greatest reductions, fosters the development of new technologies and other compliance innovations, and offers cost

savings by providing flexibility while phasing in tighter controls over time. Based on analysis of EPA's acid rain and NO_x trading programs and projections of likely application of controls under CAMR, the Agency concluded that its mercury cap-and-trade program was unlikely to result in any hotspots and committed to monitor program implementation carefully to ensure that any problems came to light."

Mercury Export Ban Legislation

Administration efforts are also focused on reducing global, anthropogenic mercury releases to air, water, and land. Much of this work is being undertaken through partnership efforts under the auspices of the United Nations Environment Programme. Examples of these efforts include educating artisanal gold miners on the risks of using mercury and the advantages of using improved technologies and practices; developing mercury use inventories; and building capacity to phase out certain uses of mercury in products. We are also sharing information on technologies to reduce mercury emissions from combustion sources, emphasizing multi-pollutant reduction approaches.

Domestically, in addition to regulatory action, EPA has spearheaded a voluntary program with private industry for the removal of mercury-containing switches in older motor vehicles in order to prevent air emissions during vehicle scrappage and steel recovery. The federal government also remains committed to a safe and effective long-term storage of federal stockpiles of surplus mercury.

S. 906, the "Mercury Market Minimization Act of 2007", is similar to House-passed legislation, and would ban the exportation from the United States of elemental mercury beginning January 1, 2010. The Administration issued a Statement of

Administration Policy (SAP) on H.R. 1534, stating that this legislation is premature pending further analysis of the many issues raised by such a ban. While there are some differences between the House and Senate bills, the issues raised by the SAP that are of concern to EPA are also raised by the Senate bill.

It is our view that there is an inadequate understanding of the potentially negative consequences of an export ban on the environment, industry (both domestic and international), and the Federal government. A ban could also prompt questions under international trade rules. Specifically, analysis should be conducted on whether such a ban (together with a European Union ban) might lead to an overall increase in mercury releases into the environment as the ban would seemingly prevent available stocks of mercury, be they in the United States or elsewhere, from being drawn down or recycled to meet unchanged global demand. Furthermore, it is not clear that a ban would lead to the reduction in high-mercury release uses, such as artisanal gold mining, in developing countries. The Administration has urged the Congress not to legislate until potential impacts are better understood and efforts have progressed to reduce mercury demand and improve mercury management in key countries.

EPA is committed to continuing its work in developing and implementing an effective global solution for reducing mercury risk. EPA believes our current domestic efforts as well as our international partnership work are critical to reducing mercury demand and use worldwide. We are committed to finding protective and comprehensive solutions, and we look forward to working with the Committee and others on this issue.

That concludes my remarks. Mr. Gulliford and I would be happy to answer any questions you may have.

