



Testimony of

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before the

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and Regulatory Affairs**

of the

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Mr. Chairman and members of the Committee, thank you for the opportunity to appear before you today to testify on behalf of the Center for Progressive Regulation (CPR) regarding the Environmental Protection Agency's (EPA) proposed mercury rule for coal-fired utilities. I have submitted several attachments to my written testimony, and I request that they be made part of the record.

CPR is an organization of academics specializing in the legal, economic, and scientific issues surrounding federal regulation. CPR supports regulatory action to protect health, safety, and the environment and seeks to inform policy debates on these issues through research and commentary.

EPA's mercury rule is the work of an agency that has wandered far afield from a commitment to rational regulation. EPA's rule would offer a generous break to coal-fired utilities. But it would imperil the health of a generation of children and others in the United States. It would allow contamination of a staple food and a resource on which many depend for their livelihood.

EPA's rule has generated a raft of criticism from states, cities, tribes, industry, and members of the public. This public outcry is not surprising, given the procedural irregularities that have come to light, given the creative interpretations of the Clean Air Act on which EPA's proposal rests, and given, most importantly, the threat to public health posed by mercury contamination of the human food chain.

CPR would like to focus today on three concerns with the EPA's proposed mercury rule.

There Is No Question That Mercury Poses a Grave Threat to Americans' Health

Mercury is a potent neurotoxin. Exposure to even small amounts of methylmercury *in utero* or during childhood can lead to permanent neurological damage. Yet one in six women of childbearing age now has blood mercury levels that pose a risk to the developing fetus. This number nearly doubles when one considers Native American and Asian-American women – fully 31.5% of these women have blood mercury levels above the limit established by EPA. The most recent data have revealed other risks from methylmercury as well, including adverse effects on the cardiovascular systems of adult men. A report released last month by the University of North Carolina found that an extremely high proportion of the general population – one in five – has mercury in their systems above EPA's limit. In short, there should be no question that mercury poses a grave threat to the health of children and others in the United States. The National Academy of Sciences reached just this conclusion in 2000, and the scientific data gathered since have continued to buttress this conclusion.

Americans are exposed to mercury when they eat fish from contaminated waters. Vast expanses of our nation's waters are currently contaminated to the level that they are under fish consumption advisory for mercury. As of 2003, 45 states and several tribes

have issued advisories placing fish caught in some or all of their waters “off limits” for human consumption. In addition, 100% of Lakes Superior, Michigan, Huron and Erie are under mercury advisory. This is an extraordinary indictment.

The EPA’s response to this widespread contamination has been guided less by scientific rationality than by political expediency. Thus, while EPA has required some industries to take real steps to reduce their mercury emissions – municipal waste combustors, for example, have reduced mercury emissions by 90% – EPA has asked little of the utility industry. Quite the contrary, EPA has gone to extraordinary – and often legally questionable – lengths to delay and diminish reductions required by the Clean Air Act. Yet coal-fired utilities dominate anthropogenic mercury emissions in the United States. And, according to EPA, coal-fired utilities are likely the source of some 29% of the mercury deposited to U.S. waters; their contribution to more localized deposition is likely even higher in many places.

EPA’s Rule Perpetuates Mercury Contamination Nationally and *Exacerbates* It Locally

The EPA has proposed two alternative approaches, neither of which would require coal-fired utilities to do much to reduce their mercury emissions until well into the next decade. Its first offering is a “MACT” or “maximum achievable control technology” standard. Its second – and preferred – option is a cap-and-trade approach.

A MACT standard is the end result of the ordinary process for regulating air toxics under section 112 of the Clean Air Act. MACT standards typically require emissions reductions on the order of 90% in three years. Yet the MACT standard that EPA fashioned here for coal-fired utilities is far off that mark – EPA would settle for only 29% reductions by 2008. EPA arrived at this unambitious figure using methods, moreover, that are insupportable and unprecedented. Indeed, one is left to wonder whether EPA produced such an indefensible MACT standard chiefly to portray the cap-and-trade approach favorably by comparison.

EPA’s cap-and-trade approach, however, is itself legally suspect and unfathomably weak. It puts a cap on mercury emissions in two phases, with the final cap to be delayed until 2018. Even two years after this date, in 2020, EPA’s own models show that emissions would only be reduced by 61% (under the most generous set of assumptions). A 61% reduction at the end of the next decade is a far cry from a 90% reduction in a few years. Further, my analysis shows that the emissions picture would be even grimmer in some regions: EPA’s cap-and-trade approach would permit eleven times more mercury emissions in the upper Great Lakes states in 2010 than would a properly conducted MACT approach; even in 2020, cap-and-trade would permit six times more mercury in this region than would MACT. The calculations supporting these projections are set forth in an article that will appear in the December issue of the *Environmental Law Reporter*, Attachment A to this testimony.

Of particular concern, my analysis shows that EPA's cap-and-trade approach would likely perpetuate or exacerbate "hot spots." Hot spots are localized areas of concentrated mercury emissions or deposition and, ultimately, exposure. Hot spots have always been the leading public health concern with cap-and-trade programs that allow trading of toxics. Perhaps sensitive to this concern, EPA conducted modeling for mercury that allows us to predict the outcome of trading before committing to the cap-and-trade approach. Importantly, this allows us to identify the winners and losers in the hot spot lottery. By way of illustration, I analyzed EPA's data for the upper Great Lakes states of Michigan, Minnesota and Wisconsin, and found a likelihood of significant hot spots here under cap-and-trade. Regionally, mercury emissions would decline only 27% under cap-and-trade. Locally, emissions would actually *increase* at 20 out of the 44 utilities – including several of the very largest sources in these three states. These hot spots would coincide with a Great Lakes region where even the general population is more inclined to catch and eat fish from local waters, and where other groups, for example the various Ojibwe and other tribes, are highly dependent on fish. Although EPA acknowledges the potential for hot spots in the preamble to the rule, it claims that it "does not expect and local or regional hot spots." EPA, however, does not appear to have tested this claim empirically.

EPA's Rule Is Not Only Weak but Unjust

EPA's rule utterly fails to protect a large swath of the U.S. population. EPA points out that someone eating only modest amounts of fish from scattered waters will be adequately protected by its rule. Who is left unprotected? EPA itself acknowledges that *anyone who regularly eats fish may not be protected by its rule*. This vulnerable population includes recreational fishers on lakes and rivers across the nation; low-income families in urban areas who depend on fish for food; tribal members in the Great Lakes and elsewhere exercising their treaty rights. This vulnerable population also includes anyone eating fish in line with the American Heart Association's recommendation of two fish meals per week.

Notably, those left unprotected by EPA's rule are disproportionately Native peoples, Asian-American and Pacific Islanders, other communities of color, and low-income communities that depend on fish. Amazingly, EPA admits this in the preamble to the rule. Having identified those affected, however, EPA does nothing to address the injustice that results.

Instead, EPA instructs these groups – and particularly children and women of childbearing age – to reduce or eliminate fish from their diets in order to "avoid" the risks of mercury contamination. Thus, rather than take steps to reduce meaningfully the sources of these risks, EPA shifts the burden to those who are exposed and asks them to protect themselves. Among other things, this approach introduces its own adverse health effects, as fish – an excellent source of protein and other nutrients – are placed virtually off limits. Consider the extraordinary burden on a young girl, who must avoid fish throughout her childhood until age 20 and then throughout her childbearing years until age 49 – EPA's rule would place this onus on her for over half her life. EPA's embrace

of risk avoidance is also a particular affront to the fishing tribes of the Great Lakes and elsewhere, for whom fishing and consuming fish are also culturally important and treaty-guaranteed practices.

EPA's turn to risk avoidance here – where the science and law so compellingly call for risk reduction – may in fact be an example of a larger and troubling trend in this Administration. Rather than stay true to the goal that “sound science” undergird regulatory decisions, senior political appointees systematically ignored the science demonstrating adverse health effects of low-level mercury exposure, as well as modeling demonstrating unacceptable spikes in pollution at the local level. In sum, EPA ought to produce regulations that are scientifically defensible, legally supportable, and just. The proposed mercury rule fails on all three counts.

Thank you for the opportunity to appear before you today. I would be pleased to answer any questions you may have.