



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 28, 2004



VIA ELECTRONIC MAIL AND FACSIMILE

U.S. Environmental Protection Agency  
EPA Docket Center (EPA/DC)  
Air and Radiation Docket and Information Center, 6102T  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460  
Attention Docket ID No. OAR-2002-0056  
[A-and-R-Docket@epa.gov](mailto:A-and-R-Docket@epa.gov)  
Fax: (202) 566-1741

**Re: *Connecticut DEP Comments on Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units***

Dear Docket Administrator:

The Connecticut Department of Environmental Protection (DEP) appreciates the opportunity to comment on the U.S. Environmental Protection Agency's (EPA's) proposed rulemaking, *National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units (Utility Mercury Reductions Rule)* (69 Fed. Reg. 4652, January 30, 2004). We recognize and appreciate that this marks EPA's first ever action to limit emissions of this toxic element. Unfortunately, as proposed, the Utility Mercury Reductions Rule is neither stringent enough nor timely enough to address the continuing health risks posed to Connecticut's citizens from exposure to transported mercury in the environment.

DEP has serious concerns with regard to the stringency of the levels and timing of reductions; the inclusion of trading provisions without appropriate safeguards; the inappropriate legal basis of the proposal under Section 111 of the Clean Air Act (the Act) and the legal inadequacy of the proposal under Section 112 of the Act; and the highly unusual and inadequate process used to develop the proposals. DEP is, nonetheless, interested and available to work cooperatively with EPA to develop measures that achieve real, timely reductions at each generating unit and explore additional strategies that would result in a sector-wide reduction of 90%, including emissions trading and averaging.

Connecticut has taken decisive action to reduce emissions of mercury from sources in the state -- even so, *our residents continue to experience unacceptable risks from environmental mercury*. It is imperative that EPA require real and expeditious reductions nationwide in mercury emissions to the air from utilities and other source categories to reduce the continued deposition of mercury in Connecticut from out-of-state transport. To so revise the Utility Mercury Reductions Rule, DEP recommends that EPA look to state efforts that have resulted in timely and effective reductions in environmental mercury as models of reductions that are technologically and

( Printed on Recycled Paper )

79 Elm Street • Hartford, CT 06106 - 5127

<http://dep.state.ct.us>

An Equal Opportunity Employer

economically feasible. In Connecticut, such mercury reduction efforts include the following:

- Adoption of new mercury standards in December 1999 for municipal waste combustors, more stringent than federal maximum achievable control technology (MACT) standards, which have resulted in mercury emission reductions averaging greater than 90% from 1995 levels for the group of municipal waste combustors. Since October 26, 2000, adoption of these state standards has realized an estimated reduction of 1,382 pounds of mercury per year;
- Implementation of Public Act 03-72 by which Connecticut became the first state to adopt legislation that requires the state's coal-fired electric generators to reduce the amount of mercury they emit starting July 1, 2008 to 0.6 lbs mercury/TBtu or a 90% reduction from the measured inlet level. This legislation sets the most stringent mercury emission limit for electric generators in the country;
- Implementation of Public Act 01-204 requiring annual mercury emissions testing at sewage sludge incinerators beginning on January 1, 2002;
- Requiring the installation of demonstration mercury control equipment at a sewage sludge incinerator. Initial testing indicates a potential 97% reduction in mercury emissions, and DEP is continuing to evaluate the control equipment for possible installation on other state sewage sludge incinerators; and
- Regulation development that includes new mercury standards for various types of incinerators and small distributed electricity generators.

Information on additional mercury reduction actions in Connecticut such as practices for dental office waste handling and mercury containing product collection is available at DEP's website: <http://www.dep.state.ct.us/wst/index.htm>.

While these changes have and will continue to result in reduction in mercury deposition from in-state sources, the citizens of our state continue to experience significant and unacceptable health risks from mercury transported into Connecticut from out-of-state. The Connecticut Department of Health has determined that freshwater fish caught in Connecticut are unsafe to eat as a result of excessively high levels of mercury in edible tissue. Most at risk are pregnant women, women planning to become pregnant within one year and children less than 6 years of age. Individuals in these sensitive groups are advised against eating more than one meal of freshwater fish per month of any species caught in Connecticut waters except trout. All others should eat no more than one meal of Connecticut freshwater fish per week. The largest current source of mercury contributing to the elevated levels of mercury in fish tissue in Connecticut is air emissions in states located "upwind."

The regulation of air emissions of mercury is key to affecting changes, either positive or negative, in ambient mercury concentrations in water bodies and aquatic life. At DEP's request, the Connecticut Institute of Water Resources conducted a study in 1996 on ambient mercury concentrations in Connecticut. The study, Preliminary Assessment of Total Mercury Concentrations in Fishes from Connecticut Water Bodies, provided information on fish tissue and sediment mercury concentrations from 56 different water bodies in the state. The sediment

data was reviewed to determine ambient levels of mercury in sediment in Connecticut. The study confirmed that non-point sources such as atmospheric deposition play a key role in mercury concentrations within Connecticut water bodies. Additionally, sediment levels of mercury are currently at a threshold where any increases in the ambient level of mercury in sediments would increase concern for a greater potential transfer of mercury into fish, possibly affecting people or animals that might consume the fish, as well as increase the potential for direct impacts on aquatic life. The relationship among air emissions, atmospheric transport, mercury deposition and fish tissue contamination is well documented in other states as well. Most recently, a study by the Florida Department of Environmental Protection<sup>1</sup> established a linear relationship between atmospheric mercury deposition and tissue levels in largemouth bass demonstrating that levels of mercury in fish tissues respond quickly to changes in mercury loads to water bodies.

Air deposition of mercury presents serious potential human health impacts from consuming mercury-contaminated fish tissue in Connecticut and regionally. Despite the efforts of the Connecticut Department of Health and DEP to notify populations at risk, significant numbers of Connecticut citizens continue to make locally caught fish a major part of their diet due to economic necessity or cultural imperative. Further, the necessity of posting waters with health advisories against eating fish has a chilling effect on Connecticut's economy by reducing spending on tourism and recreation. As explained above, Connecticut, as most Northeastern states, has moved well beyond current and proposed federal requirements to reduce sources of mercury within our borders. It is incumbent upon EPA to apply more rigorous mercury reduction standards to stack emissions at the national level in a timely manner so the downwind states can meet the standards established in the Clean Water Act for protection of human health and propagation of fish and wildlife.

Given the serious concerns expressed above, DEP urges EPA to abandon the proposed Utility Mercury Reductions Rule and develop MACT standards with stringent emissions limits and expeditious deadlines, as required by Section 112(d) of the Act. We believe that the adoption of MACT standards for utilities is necessary and appropriate to protect Connecticut's and the nation's public health and environment and suggest that EPA require utilities to make at least a 90% reduction in actual mercury emissions no later than 2008.

DEP appreciates the opportunity to provide this comment. If you or members of your staff have any questions regarding this letter, please get in touch with Anne Gobin, Chief, Bureau of Air Management at 860-424-3026.

Sincerely,



Arthur J. Rocque, Jr.  
Commissioner

cc: Robert W. Varney, Regional Administrator (EPA New England)

<sup>1</sup> *Integrating Atmospheric Deposition with Aquatic Cycling in South Florida: An Approach for Conducting a Total Maximum Daily Load Analysis for an Atmospherically Delivered Pollutant* (Revised November 2003).