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EPA Docket Center (Air Docket)
Docket Number: OAR -2002 - 0056
U.S. EPA West (6102T)
Room B-108
1301 Constitution Avenue, NW
Washington, DC 20004

Re: Comments to Docket Number OAR-2002-0056 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 (69 FR 4652-4752)**

Introduction

The Northeast States for Coordinated Air Use Management (NESCAUM) provides the following comments on EPA's 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 (69 FR 4651-4752).

Recent scientific studies have confirmed the serious health risks to the developing fetus from methylmercury exposure.[1] In addition, recent studies confirm that a greater amount of methylmercury is distributed to the fetus than previously estimated,[2] leading to a doubling of an earlier annual estimate of newborn infants at risk in the U.S from 300,000 to 600,000. In the Northeast, the prospect of over 84,000 newborns per year potentially at-risk for irreversible neurological deficits and cardiovascular abnormalities from methylmercury exposure represents one of the most critical public health threats in our region today.

Over 15,000 fish samples collected in the Northeast region confirm widespread mercury contamination of our aquatic ecosystems, irreparably threatening human health and wildlife unless actions are taken to reduce significant sources of mercury emissions. All Northeast states have issued fish consumption advisories because of mercury contamination. In addition to the toll on human health and wildlife, mercury contamination also threatens the tourist and recreational fishing industries, which contribute $3 billion a year to our regional economy.

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[1] Murata K, Weihe P, Budtz-Jorgensen E, Jorgensen PJ, Grandjean P. 2004. Delayed brainstem auditory evoked potential latencies in 14-year-old children exposed to methylmercury. J Pediatr. 2004 Feb;144(2):177-83.

[2] Stern A, Smith A. 2003. An assessment of the cord blood:maternal blood methylmercury ratio: implications for risk assessment. Environ Health Perspect. 2003 Sep;111(12):1465-70.

Recent scientific field studies have shown that reductions in mercury emissions lead to reductions in the mercury concentrations in fish tissue. After several years of implementing effective regulations to control mercury (Hg) emissions from municipal waste combustors, medical waste incinerators, and other sources in the Northeast, the electric utility steam generating units (EGUs) remain the largest uncontrolled source category of Hg and other hazardous air pollutant (HAP) emissions in the region. Further, transported mercury emissions from out-of-region coal-fired EGUs are a major contributor to mercury deposition in the Northeast. In view of the public health and environmental impacts associated with exposure to mercury and other hazardous pollutants, NESCAUM believes it is extremely important that the EPA take swift and aggressive steps to reduce emissions of these pollutants from EGUs burning coal and oil.

The following comments address EPA's proposed Utility Maximum Achievable Control Technology (MACT) rule to control mercury from coal- and oil-fired EGUs. The NESCAUM states are opposed to all three of the options EPA has proposed in this important rulemaking. Given the serious public health threat and the commercial availability of cost-effective control options, we are dismayed that EPA's proposal is far removed from what we believe is needed, achievable, cost-effective, and statutorily mandated. Accordingly, NESCAUM strongly urges EPA to promulgate final MACT standards for EGUs, with appropriately stringent emission limits and expeditious deadlines, as required by Section 112(d) of the Clean Air Act (CAA).

We have four specific concerns with EPA's proposal: (1) EPA's MACT floor determination is flawed; (2) NESCAUM strongly opposes EPA's trading scheme under Sections 112 and 111; (3) EPA needs to consider other HAPs in the EGU regulation; and (4) despite EPA's claims to the contrary, control technologies are commercially available now to substantially reduce mercury (Hg) emission from EGUs.

1. EPA's MACT Floor Determination is Flawed

EPA's first (but not its preferred) proposal is to regulate Hg emissions from coal-fired EGUs with MACT standards (without a cap-and-trade program) under section 112 of the CAA. The standards would go into effect in December 2007. NESCAUM supports this option as the only legal and appropriate mechanism for regulating Hg and other HAPs from coal- and oil-fired EGUs. However, we believe that EPA's proposed MACT limits are unacceptably lenient and are based on a seriously flawed methodology that incorporates invalid statistical manipulation of the Information Collection Request (ICR, 1999) data and unnecessary and excessive subcategorization of coal-fired boilers.[3]

The limits proposed for both the existing and new EGUs are much higher than would be allowed if EPA applied the prescribed and long-standing application of the Section 112

[3] In this and the other two approaches, EPA plans to subcategorize pulverized coal-fired power plants based on the type of coal (bituminous, subbituminous, lignite, coal refuse) and proposes to treat IGCC units differently than pulverized coal boilers.

MACT approach, which requires that the MACT limit be at least as stringent as "the average emission limitation achieved by the best performing 12 percent of the existing sources." For new sources, the reduction requirements under Section 112 must be at least as stringent as the emission control that is achieved in practice by the best-controlled similar source. For example, as part of the Federal Advisory Committee Act's (FACA) stakeholder process that was convened by EPA to develop the utility MACT,[4] the Hg control efficiencies of the eighty ICR units for which EPA had collected data under real-world field conditions were ranked. The "top twelve percent" of the 80 units, or the top 10 units, had percent control ranging from 99 percent for the top unit (measured from Hg in coal) to 84 percent for the 10th unit, with an average of 91.1 percent. None of these units had Hg-specific control technology such as activated carbon technology in place. The top 10 units are listed in Table 1.

Table 1. Determination of MACT Floor Based on Percent Reduction in Mercury
Top 12 percent (10 Plants) from EPA 1999 ICR Data

Plant Name	Calculated Hg Reduction (percent from coal)
1 Scrubgrass Generating Company, L.P.	99
2 Clover Plant Station	97
3 Mecklenburg Cogeneration Facility	96
4 Logan Generating Plant	96
5 Dwayne Collier Battle Cogeneration Facility	92
6 Stockton Cogen Company	90
7 SEI - Birchwood Power Facility	87
8 Clay Boswell	86
9 Intermountain	84
10 Big Bend	84
Average of Top 12%	**91.1%**

Source: Memo to the Utility MACT Workgroup from the Ranking Subgroup (Praveen Amar, Patrick Raher, Felice Stadler). February 5, 2002. Online. Available: http://www.epa.gov/ttn/atw/combust/utiltox/feb5memo

A 91 percent reduction from Hg in coal (from the current baseline of 75 tons per year) applied across all of the 1143 coal-fired EGUs would reduce emissions to under 7 tons of Hg. Instead, EPA is proposing only a 29 percent reduction in EGU emissions, resulting in 34 tons per year in 2007. This is almost five times more Hg than would be allowed under the prescribed application of Section 112(d). What is particularly troubling is the fact that EPA's proposed MACT standards are even less stringent than the

[4] NESCAUM staff (Praveen Amar) was one of five members representing state and local air quality regulators.

recommendations made by industry representatives during the two-year FACA stakeholder process.

Subcategorizing Is Neither Necessary Nor Desirable for Determining the MACT Floor

The CAA allows subcategorization of a source category (for example, EGUs) based on class, type, and size, but not on the kind of fuel used by sources in that category. Thus, the subcategorization of existing coal-fired EGUs based on whether units burn western coal or eastern coal, blends of coals, high- or low-Hg coal, high- or low-chlorine coal, or other combinations, is inconsistent with the CAA. We oppose the use of subcategorization by EPA in this proposal because it results in a MACT floor determination for subbituminous coal that is about three times less stringent than the one for bituminous coal. Our position is consistent with the position taken by the state and local representatives during the FACA stakeholder process (see Attachment A; October 22, 2002 report; pages 8-9). There are also a number of practical reasons to minimize the number of subcategories, some of which are addressed below in the discussion about variability. Key among them is the reduction in the regulatory burden and the increased flexibility for power plant operators in directing their fuel procurement and management strategies.

EPA's Statistical Approach to Address Variability in Establishing the MACT Floor is Fundamentally Flawed

NESCAUM finds EPA's variability analysis that was used to arrive at extremely lenient MACT floors for all subcategories, completely unacceptable. First, EPA divided the universe of the 80 power plants that comprise the ICR data set into five subcategories[5]: four based on coal rank and one on process type (i.e., IGCC). It is quite apparent that EPA did so largely because Hg emissions are easier to control up to the so-called "co-benefit" levels (in the range of only 20 to 40 percent and much less than 90 percent and higher reductions that are needed and achievable) from some ranks of coal (bituminous coal) than from others (subbituminous and lignite). The so called "co-benefits" are simply the incidental but uncertain reductions in Hg emissions that are expected to occur with technologies designed to address conventional pollutants, SO_2, NOx, and particulate matter (PM). EPA calculated the arithmetic average of the ICR emission test results from the best performing 12 percent of sources in each subcategory and then chose (separately for each subcategory) to arbitrarily adjust each average for variability arising from the Hg content of the fuel and in the performance of a particular control device in order to reflect "the actual performance of each of the floor units over the full range of operating conditions." This resulted in EPA proposing a standard 17 times higher than the numerical average of the best performing units burning bituminous coal and 8 times higher than the average for best performing units burning subbituminous coal.

[5] Bituminous, subbituminous, lignite, coal refuse, and IGCC (coal gas). As we note above, we strongly oppose such subcategorization whether it is based on coal rank or type of controls used for criteria pollutants.

The EPA approach is fundamentally flawed because it attempts to address variability by emphasizing the "variability of the inputs" (for example, variability in Hg and chlorine concentrations in coal, measurement variability in tests, and plant to plant variability). However, the basic problem with EPA focusing on "the effect of variability in the input values" is that it only addresses part of the issue. The appropriate way to address the variability of the system is to assess the effect of various components of the "variability of the inputs" on the outlet Hg concentrations after the appropriate control technology is applied. This is necessary because not one unit in the ICR data had Hg-specific controls, such as activated carbon injection (ACI).

ACI, for example, is the most advanced technology to control exhaust gas Hg and is capable of handling the "incoming variability" by adding more or less activated carbon (or by using more advanced forms of activated carbon) and other system controls. This appropriate application of technology can be effectively used to meet prescribed stringent emission rate limits. The requirement that these stringent emission limits be met on an annual average basis rather than on daily or hourly basis will also provide substantial operational and compliance flexibility without worrying about various components of input variability.

We believe common sense and standard engineering practices provide a much more appropriate and workable approach to address variability than statistical manipulation of data as undertaken by EPA. For example, the FACA stakeholders representing state and local air quality agencies (see Attachment A, pages 10-16) recommended that a "safety factor" in the range of two to three be applied to the limit obtained strictly from the "average of the top 12 percent" MACT procedure (e.g., 0.4 to 0.6 lb/TBTU, compared to 0.2 lb/TBTU based on the "12 percent rule"). Also, state and local agency stakeholders recommended a combined standard (less stringent of a percent reduction (85 to 90 percent) or an emission limit (0.4 to 0.6 lb/TBTU)) that provides even more flexibility in handling variability in all its forms, real or potential.

In summary, we believe that EPA's variability analysis is an exercise in statistical manipulation of data used to obtain a predetermined result. Further, we believe that the Agency addressed the wrong question. Therefore, NESCAUM strongly objects to EPA's proposal to allow the values of 2 lb/TBTU for existing bituminous coal-fired boilers and 5.8 lb/TBTU for existing subbituminous coal-fired boilers when much more stringent levels can be readily achieved using commercially available technology.

We would also like to note that this is not the first time EPA has had to address variability in setting NSPS or MACT standards. We recommend that EPA follow the same procedure as was followed for the Hg MACT for MWCs and NSPS for industrial boilers for NOx to handle variability in the present proposal.

2. *NESCAUM Strongly Opposes EPA's Trading Schemes Under Section 112 and Section 111*

We believe that the public health and environmental impacts associated with Hg exposure warrant the most stringent controls achievable on EGUs. Widespread methylmercury contamination, primarily from deposition of Hg from the atmosphere, has resulted in elevated levels of Hg in fish. In fact, methylmercury contamination of fish is so pervasive in the Northeast and throughout the U.S. that 45 state health departments have issued freshwater fish consumption advisories. Fish-eating birds and mammals at the top of the food web are also at risk from consuming methylmercury-contaminated fish.

However, EPA's proposed trading schemes do not achieve the needed reductions in Hg emissions from EGUs to adequately protect public health and the environment. While we support properly designed cap-and-trade approaches for NOx and SO_2, we oppose the Hg cap-and-trade approach. Therefore, NESCAUM strongly opposes the two options offered by EPA that allow emissions trading of Hg and other HAPs between utilities. One proposal allows a cap-and-trade program under section 112. The second proposal allows a cap-and-trade program under Section 111.

Under Section 112, EPA proposes to allow trading of Hg emissions between utilities on a national basis with a 34-ton annual cap in 2007. In the second proposal, EPA proposes to implement the same cap-and-trade approach under the NSPS provisions of Section 111, which is expected to achieve only a 54 percent reduction in Hg emissions by 2018 when the role of banking and trading of mercury emissions in delaying the target year is considered. Clearly, both emissions trading proposals fall far short of what is technologically feasible and needed to protect human health and the environment.

NESCAUM does not believe that the Hg emissions trading approach proposed by EPA is allowed under either provision of the CAA. Furthermore, we do not believe that section 112(n) allows for emission trading once the finding was made by EPA to regulate Hg as a HAP in December 2000. We also strongly oppose the removal of coal- and oil-fired EGUs from the section 112(c) list. Such an action would be entirely inconsistent with the federal air toxics program given the fact that EGUs are one of the largest sources of HAPs in the country. We also note that at no time was the possibility of a mercury cap-and-trade approach raised during the two-year FACA stakeholder public process to develop a mercury MACT standard. Consequently, in NESCAUM's opinion, EPA's cap-and-trade scheme contravenes the CAA, fails to protect public health and the environment, and represents a betrayal of the public stakeholder process.

Therefore, NESCAUM strongly urges EPA to reject this poorly conceived approach and to promulgate final MACT standards with appropriate and achievable emission limits (i.e., > 90 percent controls, See Table 1) and expeditious deadlines, as required by Section 112(d) of the Clean Air Act.

Specific Comments on EPA's Proposal to Regulate EGUs under Section 111 and Concerns about Hot Spots

Additionally, the Northeast states believe there are many other problems with the Section 111 approach as outlined below.

- The approach would result in very weak emission limits for Hg. EPA's proposal under Section 111 calls for a national emissions cap in 2010 of 34 tons of Hg per year. This cap does not require any additional control of Hg beyond the so-called "co-benefits" expected from other programs (for example, EPA's proposed Clean Air Interstate Rule), which are aimed at reducing emissions of NOx and SO_2. However, while the proposal cites a 15-ton final annual cap to be achieved in 2018, EPA does acknowledge in its proposal that the annual cap could actually be as high as 22 tons, when the role of emissions banking and trading in essentially delaying the target year is considered.

- The deadlines in the Section 111 proposal are extremely protracted. The court settlement requires EPA to issue final utility emission standards for HAPs by December 2004 and compliance by the end of 2007 (with the potential for one- or two-year extension, if justified). By contrast, EPA's proposal postpones final compliance until 2018 and would allow compliance to be further delayed as a consequence of the emissions banking and trading provisions. Given the serious public health and environmental threats posed by Hg exposure, this delay of more than a decade is irresponsible and unacceptable. It is also counter to the stipulations agreed upon by the EPA in the court settlement.

- The Section 111 proposal is administratively unworkable since EPA can only promulgate regulations that establish a procedure for states to follow in establishing NSPS for existing sources. This prolonged approach would result in a scenario where fifty states develop their own Hg control plans, rather than follow one consistent national approach. We do not believe that Congress intended to regulate EGUs in this manner. Furthermore, this does not comport with the national multi-pollutant framework that is also being espoused by EPA.

Another major concern is that EPA's emissions cap-and-trade approach will allow EGUs to purchase and use allowances in lieu of reducing emissions on site. Although EPA's position is that it does not expect "hot-spots" to develop from trading, EPA has not considered local deposition of Hg associated with emissions trading that can disproportionately affect sensitive environmental ecosystems. Sources that purchase allowances in effect emit uncontrolled levels of all three species of Hg: gaseous elemental Hg, reactive gaseous (oxidized) Hg (RGM) and particulate Hg. The mercury trading scheme can exacerbate existing hot spots and possibly create new ones near power plants because the RGM – which can be as high as 70 percent of the total Hg emitted from a bituminous coal-fired power plant – has relatively short travel distances (up to 50-100 kilometers) and small residence times in the atmosphere (on the order of a day or two), and, therefore, tends to deposit locally near the source.

The importance of controlling Hg emissions from EGUs ("new" Hg) has been demonstrated in recent field studies that have shown that Hg newly deposited to the zone of methylation in the water body is more readily converted to methylmercury than existing Hg pools.[6] It is also important to note that in addition to local source impacts from EGUs, the Northeast region is affected by long-range transport of elemental Hg emitted from EGUs because many areas in our region – including remote areas – experience high ozone levels, which can oxidize elemental Hg and, therefore, increase Hg deposition throughout the ozone-polluted airshed.

3. EPA Needs to Include Other HAPs into the MACT Regulation

Congress specifically mandated that all significant HAPs be regulated when a MACT rule is developed for a source category. However, another major flaw in EPA's proposed rule (and it applies to *all* three proposals) is that it completely ignores requirements in Section 112 for EPA to address HAPs other than Hg from coal-fired utilities (and nickel emissions from oil-fired utilities) that are emitted from power plants. The technology-based MACT program under the CAA is designed to ensure that all significant sources of HAPs implement controls to reduce emissions to the maximum extent achievable. Given our incomplete understanding about the health impacts of HAPs, we believe that the legislative mandate that EPA address all HAPs is based on prudent public health policy.

In addition to Hg and nickel, the major HAPs of concern emitted from EGUs include acrolein, arsenic, chromium, cadmium, dioxins/furans, and acid gases (hydrochloric acid and hydrofluoric acid). NESCAUM's technical review of the risk assessment that EPA conducted under in Section 112(n)(1) or Utility Report to Congress (Utility RTC) indicates that the assessment of HAPs emitted from EGUs was incomplete and inadequate. (A summary of the deficiencies in the Utility RTC is summarized in Table 2, Attachment B). In fact, the risk assessment does not appear to have addressed numerous external peer review comments that were submitted to EPA in 1995, including a specific request that further analysis of HAPs other than Hg and nickel be conducted. Therefore, the record does not support EPA's conclusion that "*Utility units of the remaining HAP examined in the Study did not appear to be a concern for public health.*"

There are several important implications associated with EPA's use of an incomplete and inadequate risk assessment of HAPs from EGUs. First, EPA cannot make the determination that other HAPs should be excluded from regulation without completing an adequate risk assessment of HAPs emitted from EGUs. Second, EPA is obligated to consider the advancements made in human health risk assessment since 1993-1994 in order to ensure that the regulatory decision is adequately protective of public health and scientifically defensible. This includes an assessment of more recent information on the health effects of HAPs, cumulative risks associated with exposure to all HAPs emitted from EGUs, risks associated with metals, and inclusion of potentially sensitive subpopulations, such as children, in the exposure assessment and characterization of risks

[6] See Attachment B

from EGUs. EPA should also provide a summary of its response to external peer review comments on the Utility RTC. Finally, EPA needs to correct the summary of the health effects information on Hg that is presented in Section C of the preamble of the Federal Register proposal. Currently, the summary downplays the findings of the adverse health effects associated with Hg. It is also critically important for EPA to include recent studies that confirm the health risks to the developing brain and cardiovascular system, especially to the developing fetus and child, from methylmercury exposure.[7] Recent studies have also linked the neurological changes to decreased nervous system control of the heart function.

4. Control Technologies are Commercially Available to Substantially Reduce Hg Emission from EGUs

The NESCAUM states strongly disagree with EPA's stated position that Hg emission control technologies are currently not available and will not be until at least 2010. The findings of recent NESCAUM analyses (see Attachment C) demonstrate that commercially available control technologies, as well as rapidly emerging technologies, are capable of achieving 90 percent and higher emission control. Clearly, EPA's proposals to achieve about a 30 percent reduction by 2007-2010 are not credible given the factual record. For example, ACI technology has been applied to municipal waste combustors in the U.S. for over five years (in some cases approaching ten years) and is routinely achieving greater than ninety percent reductions, with some units achieving controls as high as 99 percent (Attachment C). While there are relevant differences between municipal waste combustors and coal-fired boilers, the application of ACI technology to coal-fired boilers does not depend upon any new technology breakthrough. Rather, as has been successfully demonstrated through studies funded by the U.S. Department of Energy, it is a matter of traditional technology transfer to these larger boilers (Attachment C). We, therefore, strongly disagree with EPA's misleading characterization of the finding of our October 2003 report (Attachment C) reported on page 4674 of the Federal Register. We request that EPA correct the record to reflect the actual conclusions of our report.

As we note above, EPA's proposals are based on the assumption that control technologies that are capable of achieving substantial Hg emission reductions would not be available until much later (2010 and beyond). It is illuminating to view the EPA's proposals in the context of the encouraging relationship evident over the last several decades between environmental regulatory drivers and technological development. A major finding of a September 2000 NESCAUM study was that innovation in control technologies has occurred only after regulatory drivers with well-defined and stringent emission targets and deadlines were adopted.[8] This dynamic has occurred even when control options were limited or untested at the time regulations were introduced. The regulations for

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[7] Murata K, Weihe P, Budtz-Jørgensen E, Jørgensen PJ, Grandjean P. Delayed brainstem auditory evoked potential latencies in 14-year-old children exposed to methylmercury. J Pediatr 2004; 144: 177-83. Also see footnote 1.

[8] Amar, P. (Project Director), NESCAUM report. Environmental Regulation and Technology Innovation: Controlling Mercury Emissions from Coal-Fired Boilers, September 2000

controlling SO_2 and NOx emissions from EGUs are two recent examples and controlling Hg should be no exception.

Cost of Hg Control Technologies

It is also important to note that both the capital costs and cost effectiveness of controlling Hg from coal-fired boilers need to be presented in a realistic manner. For example, a common but quite misleading practice is to present cost effectiveness in terms of dollars per pound of Hg removed from the application of ACI or other technologies and compare this to the costs of controlling a ton of NOx or SO_2 from power plants. For example, typical values of cost effectiveness are as follows: $5,000 to $30,000 per pound of Hg removed for ACI; $100 to $200 per ton of SO_2 removed; and $1,000 to $1,500 per ton of NOx removed. Obviously, the control costs appear high using such a comparison because Hg is emitted in far smaller quantities than conventional pollutants (in the U.S., power plants currently emit "only" 48 tons per year of Hg; compared to 5 million tons per year of NOx and over 10 million tons per year of SO_2). Control costs for Hg on a pound for pound or ton for ton basis are therefore necessarily higher. However, it must be emphasized that Hg presents a far greater public health and environmental hazard on an equivalent mass basis when compared to criteria pollutants such as SO_2 and NOx.

A more illuminating metric for estimating true costs of technology for a project is when the costs of controlling Hg with a technology such as ACI are expressed in terms of cost to the ratepayer (e.g., mills per kWh of electricity). When this approach is followed, the costs are even lower than the costs currently being incurred for control of pollutants such as NOx from EGUs (See Table 2). Note that these values for NOx are considered cost-effective by industry and regulatory agencies, and were the basis for recent (1997-1998) state and federal requirements for wide-scale NOx reductions from EGUs in the eastern U.S. under "Section 110 Transport SIP call" as well as the EPA's newly proposed (on January 30, 2004) Clean Air Interstate Rule (CAIR).

Table 2. Comparison of Mercury Control Costs with NOx Control Costs

Control Type	Total Annual Cost (mills/kWh)
Mercury Controls	0.18 – 1.15
Low-NOx Burners	0.21 – 0.83
Selective Catalytic Reduction	1.85 – 3.62

Source: Srivastava, R.K., C.B. Sedman, and J.D. Kilgroe. "Preliminary Performance and Cost Estimates of Mercury Emission Control Options for Electric Utility Boilers." AWMA 93rd Annual Conference & Exhibition, Salt Lake City, UT, 2000.

Status of Mercury Control Regulations in the States

Many states have already adopted stringent limitations on Hg emissions from new and existing power plants (Attachment C). Connecticut has passed legislation that requires 90 percent Hg control by July 2008. Massachusetts's proposed regulations require 85 percent Hg control by January 2008 and 95 percent Hg control (equivalent to 0.2 lbs/TBTU) by October 2012. Recently, the state of New Jersey proposed new rules that would require up to 90 percent Hg control (equivalent to 0.6 lbs/TBTU) by 2007 with the possibility of a five-year extension if multi-pollutant control option is chosen by the EGUs. The state of New Hampshire's proposal, subject to legislative approval, would require a statewide Hg reduction of 60 percent by 2008 and of 80 percent by 2011. In a recent (June 2003) MACT determination for a new coal-fired boiler the state of Iowa required a Hg control of at least 83 percent and the use of ACI as MACT. These states actions were based on an assessment of the same technical and scientific record available to EPA including the findings from recent field studies in Florida discussed above, which show that reducing Hg emissions results in measurable decreases in Hg deposition and subsequent reductions in fish Hg concentrations over a short-time horizon of just a few years. The encouraging findings from such field studies and the fact that much more stringent state Hg standards for power plants exist raises a serious question as to how a less stringent EPA MACT standard for these sources is justified.

Conclusion

Our conclusions are based on two simple facts. First, uncontrolled emissions of Hg and other HAPs from EGUs are a serious threat to public health and the environment. Second, control technologies to reduce Hg emissions by 90 percent and higher are not only commercially available now, they also are cost effective. Given these facts, we strongly oppose the three EPA proposals because they all fall far short of what we believe is needed, achievable, cost effective, and statutorily mandated. We strongly urge EPA to adopt Hg rules that reflect the Congressional intent of maximum achievable control of all coal-fired EGUs, are based on rigorous application of the requirements of the Section 112 of the Clean Air Act, and do not rely on trading of Hg emissions.

Sincerely,

Kenneth A. Colburn

Kenneth A. Colburn
Executive Director