

STAPPA / ALAPCO

STATE AND TERRITORIAL  
AIR POLLUTION PROGRAM  
ADMINISTRATORS

ASSOCIATION OF  
LOCAL AIR POLLUTION  
CONTROL OFFICIALS

June 29, 2004

S. WILLIAM BECKER  
EXECUTIVE DIRECTOR

Docket ID No. OAR-2002-0056  
EPA Docket Center (Air Docket)  
U.S. Environmental Protection Agency  
West (6102T), Room B-108  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

Dear Sir or Madam:

On behalf of the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO), thank you for this opportunity to comment on the "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: Proposed Rule," which was published in the *Federal Register* on January 30, 2004 (69 *Federal Register* 4652) and the "Supplemental Notice for the 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," which was published in the *Federal Register* on March 16, 2004 (69 *Federal Register* 12398).

It is well known that mercury is a powerful neurotoxin that accumulates in the food chain and can cause damage to the brain and nervous system when ingested. In fact, because of methylmercury contamination, the U.S. Environmental Protection Agency (EPA), the Food and Drug Administration, 45 states throughout the country and other organizations, such as Health Canada, have issued fish consumption advisories to the public due to elevated concentrations of mercury. In January 2003, the Centers for Disease Control and Prevention estimated that nearly 8 percent of women of childbearing age are exposed to mercury levels that are above those considered safe for a developing fetus. More recently, EPA researchers have indicated that, based on examinations of umbilical cord blood, the estimate is closer to 15 percent.

In view of the dangers associated with exposure to mercury and other hazardous air pollutants, STAPPA and ALAPCO believe it is extremely important that EPA take swift and

aggressive steps to reduce emissions of these pollutants from utilities and other source categories.

Unfortunately, for the reasons that will be described in these comments, STAPPA and ALAPCO are extremely dismayed with EPA's proposals to regulate hazardous air pollutants from electric utilities. We do not believe the rule will adequately protect public health and the environment, a concern that is shared by many others. For example, the Children's Health Protection Advisory Committee (CHPAC), a panel of experts that EPA formed to advise the agency on issues related to the protection of children's health, has expressed deep concerns with EPA's proposed rule. Specifically, CHPAC stated, "[f]rom our understanding, the unique vulnerabilities of children, infants, and women of child-bearing age were not adequately considered in the development of the EPA's proposed rule." Additionally, CHPAC indicated that the current proposal does not go as far as feasibly possible and "[t]o protect children from mercury exposure, EPA needs to go beyond the minimum required by statute (i.e., the proposed MACT floor)."

In view of our deep concerns and the objections other groups have expressed regarding the proposal, STAPPA and ALAPCO strongly urge the agency to abandon its proposed strategy and, instead, develop final Maximum Achievable Control Technology (MACT) standards, with stringent emission limits and expeditious deadlines, as required by Section 112(d) of the Clean Air Act. We have several major concerns with EPA's proposals, which we will articulate in this comment letter.

### Flawed Emission Limits Under Sections 111 and 112

EPA has included several options for addressing emissions of hazardous air pollution from electric utilities, including proposals under Section 111, Section 112(d), and Section 112(n) of the Clean Air Act. We oppose all three options for a variety of reasons; most importantly, each is extremely weak and not sufficiently protective of public health and welfare.

We believe the Clean Air Act clearly calls for emissions of hazardous air pollution from electric utilities to be regulated under Section 112. Therefore, EPA's proposal to regulate those sources under Section 111, instead, is totally inappropriate. Furthermore, the limits contained in the Section 111 proposal are not nearly stringent enough. The proposal calls for an interim emissions cap – expected to be 34 tons per year – to be achieved by 2010 that, in fact, does not require *any* additional control of mercury beyond the co-benefits expected from other programs aimed at reducing emissions of sulfur dioxide and nitrogen oxide, such as the Interstate Air Quality Rule (IAQR). It appears, then, that the interim cap for mercury is wholly dependent upon the IAQR, rather than on any measures specifically designed to address hazardous air pollutant emissions. What would happen if, for some reason, the IAQR does not become final? Would the 2010 cap remain enforceable? Moreover, while EPA specifies a 15-ton final cap to be achieved in 2018, the agency acknowledges in its proposal that mercury emissions could reach 22 tons (or only a 54-percent reduction from the 48 tons determined in 1999) in 2020, when banking and trading are utilized. Thus, EPA's stated 15-ton cap will not truly be achieved. We believe this does not adequately reflect what is technologically feasible and falls far short of what is needed to provide appropriate public health and environmental protection.

While we support regulating hazardous air pollution emissions from utilities under Section 112, as Congress intended, we believe EPA's proposals under Section 112(d) and 112(n) are seriously flawed. The EPA proposal sets MACT levels that would result in national emissions of 34 tons per year, which is clearly not consistent with the legislative mandate for calculating MACT under Section 112. Astonishingly, these levels are even less stringent than the recommendations made by industry representatives during an EPA-sponsored utility MACT development stakeholder process.

STAPPA and ALAPCO are extremely troubled by the statistical analysis regarding the variability of mercury content that EPA used in developing the proposed MACT standard. We believe the Clean Air Act is clear that EPA should base MACT for existing sources on the average of the top 12 percent of sources. We also believe variability in coal mercury content is adequately addressed in the annual averaging time of the standard. EPA's method for accounting for the variability of mercury content in coal is an inappropriate manipulation of the data. It resulted in emission limits that are far more relaxed than they should have been, based on the appropriate use of available data on well-controlled sources. Several state and local air agencies have conducted a thorough review of EPA's variability analysis and are providing the agency with specific comments regarding its inadequacies. We urge EPA to review those comments carefully. In light of our concern about the inappropriateness of EPA's variability analysis, we strongly urge EPA to develop the final MACT standard *without* the faulty statistical analysis the agency incorporated into the development of the proposal.

In addition to using a flawed variability analysis to develop the MACT standards, EPA failed to consider all available technologies. For example, activated carbon injection is commercially available and is widely recognized as a viable control technology for mercury. It has been demonstrated with pilot and full-scale demonstration projects on coal and has been used for over 10 years on other large combustion sources. Also, states are now requiring that activated carbon injection be installed on new coal-fired units for the control of mercury. In failing to consider available technologies like activated carbon injection, EPA has veered significantly from its past approach for developing mercury emission limits for combustion sources and has provided no justification for this dramatic change in the development of emission limits.

In previous MACT standards, EPA has not required technologies to be in long-term use to be considered "commercially available" and to be evaluated as a potential control method. Specifically, at the time EPA proposed the new source performance standards and emission guidelines for municipal waste combustors, activated carbon injection had been tested at only two facilities in the United States. Nonetheless, EPA justified the proposal to use activated carbon injection to set emission limits for mercury "beyond the floor" because the tests showed lower mercury emissions to be achievable, and because the incremental costs to control mercury beyond the floor were low (*59 Federal Register* 48198 and 48228). EPA did not indicate that its deliberation was limited to control strategies the agency determined to be in long-term use when developing emission limits. Further, EPA continued to evaluate the applicability and efficacy of activated carbon injection when developing mercury emission limits at hazardous waste and medical waste combustors, even when this technology was rarely used at facilities.

EPA has not provided justification for considering coal-fired power plants in a different light. In fact, EPA has likely significantly frustrated the rapid and wide deployment of mercury control technologies by not considering their use for utility boilers, since the very act of EPA evaluating a technology as a means of developing an emissions limit drives the further development and installation of technologies.

EPA is undoubtedly well aware from its research that sorbent injection technologies, such as activated carbon injection, have been demonstrated to achieve significant mercury emission reductions at coal-fired power plants, regardless of coal-type. For example, a recent study by the Northeast States for Coordinated Air Use Management (*Mercury Emissions from Coal-Fired Power Plants* – October 2003) concludes, based on full-scale demonstration of activated carbon injection technology, that mercury control efficiency of above 90 percent is feasible (at costs similar to those of nitrogen oxide removal).

State and local permitting authorities have been relying on results from these studies to establish mercury emission limits in permits issued for the construction of coal-fired boilers. For example, Wisconsin is preparing to permit a coal-fired electric utility plant, using subbituminous coal, at 83-percent control efficiency.<sup>1</sup> Also, Iowa has issued a permit for a facility that will operate with subbituminous coal. That permit sets a limit of 1.7 lb Hg/TBtu, which is equivalent to an 83-percent reduction for operation with coal from the source with the highest average mercury content.<sup>2</sup>

Clearly, since a coal-fired power boiler operator holding a permit with mercury limits that rely on sorbent injection has commenced construction of a facility under that permit, the technology is clearly in commercial use, and thus must be considered in the development of mercury emission limits.

Finally, EPA's proposal also includes an alternative MACT scheme that would allow for a cap-and-trade program similar to the proposal under Section 111. The preamble indicates that EPA would institute such a program under the provisions of Section 112(n) of the Clean Air Act. Section 112(n) calls for EPA to conduct a study for Congress describing the public health hazards resulting from utility emissions and describing control alternatives. Section 112(n) also states that "[t]he Administrator shall regulate electric utility steam generating units under this *section...*," (i.e., Section 112) (emphasis added). It does not indicate that the regulations should be established under that *subsection* (i.e., subsection 112[n]). Sections 112(d), 112(f) and 112(h)

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<sup>1</sup> Wisconsin Public Service Corporation Weston Unit 4 – 500 MW supercritical pulverized subbituminous coal-fired boiler; 1.7 lb. of Hg./TBtu controlled; 10.0 lb. of Hg./TBtu uncontrolled; 83% mercury control efficiency; sorbent injection/baghouse/dry FGD; sorbent not identified.

<sup>2</sup> MidAmerican Energy Company CBEC (Council Bluffs Energy Center) Unit 4 - 790 MW (estimated net) 7,675 MMBtu/hr heat input supercritical pulverized subbituminous coal-fired boiler; 1.7 lb. of Hg/TBtu (controlled); 10 lb. of Hg/TBtu (uncontrolled); expected control efficiency of 83% on coal with highest average mercury content; activated carbon injection with a minimum feed rate of 10 pounds per million cubic feet of exhaust gas. An optimization study required in which facility is to optimize control and can try other sorbents. Other controls - baghouse/selective catalytic reduction (SCR)/dry flue gas desulfurization (FGD).

of the Clean Air Act are the only subsections of Section 112 under which EPA is authorized to establish National Emission Standards for Hazardous Air Pollutants (see 40 CFR 63.2). Therefore, EPA is not authorized to establish emission standards under Section 112(n).

### Recommended MACT Standard

As the Clean Air Act requires, EPA should establish a MACT standard that reflects *at least* “the average emission limitation achieved by the best performing 12 percent of the existing sources” or “the emission control that is achieved in practice by the best controlled similar source.” Rather than recommending a specific technology, STAPPA and ALAPCO suggest a performance standard. Also, we prefer a common standard for bituminous and subbituminous coal, but different percent limits can be considered for the coal types, as long as the limits provide for very good controls of mercury emissions and do not promote fuel switching or blending to avoid controls (see discussion below). Accordingly, STAPPA and ALAPCO believe it is reasonable to consider 90-percent control for sources using bituminous coal and 80-percent control for units firing subbituminous coal. These limits would result in a national emission reduction between 85-90 percent, which is much more stringent than the decreases expected from EPA’s proposal.

In summary, we do not believe EPA’s proposal is appropriate or consistent with the requirements of the Clean Air Act. As we have recommended, the agency should calculate and establish a more stringent MACT level, in accordance with a proper reading of Section 112.

### Coal Blending and Switching

We are concerned about the effects of fuel switching and blending under EPA’s proposal. The proposed limits for subbituminous coal are so lax – in fact, they are tantamount to no control – that facilities may switch from bituminous to subbituminous coal or blend their fuels simply to obtain a higher allowable limit and escape stricter controls. The result would be higher emission limits and greater emissions of mercury. We recommend that the final rule address this problem by requiring a stricter emission limit for subbituminous coal (i.e., 80 percent). Additionally, EPA should require facilities that blend fuels to meet the most stringent emission limit that applies to whatever types of coal it uses.

### Deadlines

We are very concerned that the deadlines in the Section 111 proposal are extremely protracted. While the settlement agreement under which EPA is operating calls for the agency to issue final utility standards for hazardous air pollutants by March 2005 (formerly December 2004), with compliance by December 2007, EPA’s proposal postpones final compliance until 2018 and, as mentioned, would allow compliance to be delayed even further, perhaps for many years, due to banking and trading. We believe this extraordinary delay in compliance is inappropriate and counter to the mandate of the Clean Air Act and the settlement agreement.

The Clean Air Act requires that MACT be determined first and be no less stringent than the average of the best 12 percent of sources. The timing of compliance is to be a separate consideration. If, after the MACT determination is complete, it becomes evident that more than

three years is required for all facilities to comply, additional time is available under Sections 112(i)(3) and 112(i)(4) of the Clean Air Act. If Congress had intended for EPA to always limit a MACT determination to what could be achieved in three years, it would not have provided these special extensions.

We recognize that the adoption of facility-by-facility controls with the effectiveness we are recommending represents a significant commitment on the part of many sources and may require more time than the traditional three-year compliance time period for MACT sources. Therefore, if needed, EPA can provide the extensions of time for compliance that are already available within the Clean Air Act.

### Trading

STAPPA and ALAPCO are extremely concerned that EPA is proposing on a national basis to allow trading of mercury emissions between utilities. Not only do we question the legality of mercury trading, we are also very concerned that trading could lead to serious “hotspot” problems around the country.

While mercury emissions can travel great distances, some of the pollutant can also be deposited near its source. In fact, there is recent evidence that sources of mercury can have significant local impacts. In November 2003, the state of Florida published a study entitled, *Integrating Atmospheric Mercury Deposition with Aquatic Cycling in South Florida*, which estimated how quickly fish tissue levels respond to decreased regional mercury emissions. According to state officials, drastic reductions in the mercury concentrations in fish and wading birds in the Everglades “...are directly linked to the installation of technology that reduced mercury in emissions from industries in South Florida by a 100-fold during the last two decades.” Additionally, according to a report of the New Jersey Mercury Task Force, which examined local emissions, models, and other studies, “it is likely that approximately half of the mercury that is deposited in New Jersey comes from relatively nearby sources.” Thus, the concern about local sources causing local mercury hotspots must not be dismissed.

In the proposal, EPA has likened the mercury trading proposal to the acid rain trading program that is in place. Such a comparison is not appropriate because of the nature of the pollutants in question. While the acid rain program focused primarily on emissions contributing to welfare effects, the utility proposal focuses on mercury, which is a neurotoxin with serious health impacts. The two programs are not comparable.

EPA has proposed that any hot spots could be addressed through the adoption of more stringent state or local standards. While the adoption of more stringent standards by state and local agencies is a fundamental right that the Clean Air Act provides for almost all of its programs, the reality is not so clear-cut. Implementing more protective air quality measures is often unrealistic, if not impossible, for many areas. According to a survey that STAPPA and ALAPCO conducted, approximately one-half of state air pollution control agencies have restrictions on their ability to adopt programs that are more stringent than those of the federal government. Therefore, there is the very real possibility that EPA’s proposal would result in hot

spots that would remain unaddressed, endangering the population living in that area and the surrounding environment.

We have reviewed the trading program EPA outlined in both the proposal published in the *Federal Register* on January 30, 2004 and the supplemental notice on March 16, 2004. In light of the concerns we have raised regarding trading of mercury emissions between utilities, we recommend that EPA abandon this approach.

#### Additional Deficiencies of Proposed Use of Section 111

As stated earlier, STAPPA and ALAPCO believe EPA's choice of Section 111 as the vehicle for regulating emissions of hazardous air pollutants from electric utilities is highly inappropriate. By using Section 111 of the Clean Air Act to regulate mercury and nickel emissions from utilities, EPA has ignored other important statutory obligations under Section 112 of the Clean Air Act. For instance, EPA is disregarding the mandate to examine other hazardous air pollutants including, but not limited to, arsenic, chromium, cadmium, dioxins and hydrogen chloride. We strongly urge EPA to address emissions of other hazardous air pollutants in addition to mercury and nickel and to do so under Section 112.

Furthermore, while Section 112 requires EPA to evaluate and address the risks that remain eight years after a MACT standard is issued, Section 111 circumvents those requirements and does not mandate a future evaluation of residual risk. The Residual Risk program contained in Section 112(f) is a critical element of the Clean Air Act's efforts to protect public health against the dangers of exposure to toxic air pollution and should be applied to utilities, as it is to other sources of hazardous air pollutants.

STAPPA and ALAPCO strongly believe there is no justification for EPA to take such a huge legal risk by regulating mercury under Section 111 of the Clean Air Act when Congress clearly intended that mercury, like other hazardous air pollutants, be regulated under Section 112. Adoption of a Section 111 rule will undoubtedly be the subject of protracted legal battles, which will further delay the protection of public health and the environment.

Finally, we are concerned that the use of Section 111, rather than Section 112, will result in a process similar to the State Implementation Plan (SIP) system currently used for Criteria Pollutants. That is, each state or local agency will be required to develop a plan, submit it to EPA, and await approval. Rather than a uniform national approach to regulating HAP emissions from utilities, which Section 112 would provide, the result of a Section 111 regulation would be a time-consuming process, a duplication of effort by each state and many local agencies, and an inconsistent set of state-by-state programs.

#### Process for Developing the Proposals

We feel compelled to comment on the process EPA used to develop these proposed standards. STAPPA and ALAPCO representatives were involved in the formal, one-and-a-half year Federal Advisory Committee Act (FACA) stakeholder process that EPA sponsored to develop the utility MACT. The FACA workgroup consisted of federal, state, local, industry and

environmental group representatives, including six members representing state, local and tribal agencies; eight members representing environmental organizations; 14 members representing industry; one member representing control equipment vendors; and two members representing coal interests, producers and unions. This group met 14 times over a period of 18 months and thoroughly analyzed all issues related to the regulation of toxic air pollution from utilities.

In its January 30, 2004, proposal, EPA completely disregarded the stakeholder group's deliberations. For example, during the stakeholder process, the group never considered the possibility of substituting Section 111 for Section 112. In addition, the FACA workgroup dismissed the possibility of trading mercury emissions between utilities. Furthermore, upon completing the process, the workgroup requested that EPA complete integrated planning modeling based on the workgroup's final recommendations. EPA has failed to do this. It is unacceptable that EPA would abandon the efforts of the agency's FACA workgroup and propose a rule that represents such a marked departure from what the stakeholders considered and recommended. In addition to rejecting the expert advice the agency needed, EPA's action undermines and devalues the entire FACA process.

While we were extremely disappointed that the recommendations of the FACA workgroup were ignored, we were absolutely astonished to learn that the proposals EPA issued contained evidence of excessive reliance on industry input. For example, we noted that portions of documents supplied by an industry group and a law firm representing industry clients appeared verbatim or in nearly identical form in the proposals. This does not reflect an open process that takes into account the recommendations of the other stakeholders.

### Conclusion

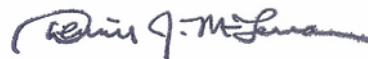
In light of all of these serious concerns with EPA's proposed regulations for limiting hazardous air pollutant emissions from utilities, STAPPA and ALAPCO strongly urge EPA to abandon its proposed strategy, and, instead, develop final MACT standards with stringent limits as required by Section 112(d) of the Clean Air Act. We continue to believe that the adoption of MACT standards for utilities is necessary and appropriate to protect public health and the environment.

Please do not hesitate to contact us if you need additional information.

Sincerely,



James A. Joy, III  
President of STAPPA



Dennis J. McLerran  
President of ALAPCO