Control of Mercury Emissions from Utilities—the State and Local Agency Perspective

Bill Becker STAPPA/ALAPCO November 30, 2005

What I am Going to Cover

- ☐ The Problem
- □ Regulatory History
- ☐ EPA's Clean Air Mercury Rule
- ☐ State/Local Agency Concerns with CAMR
- ☐ STAPPA/ALAPCO Response

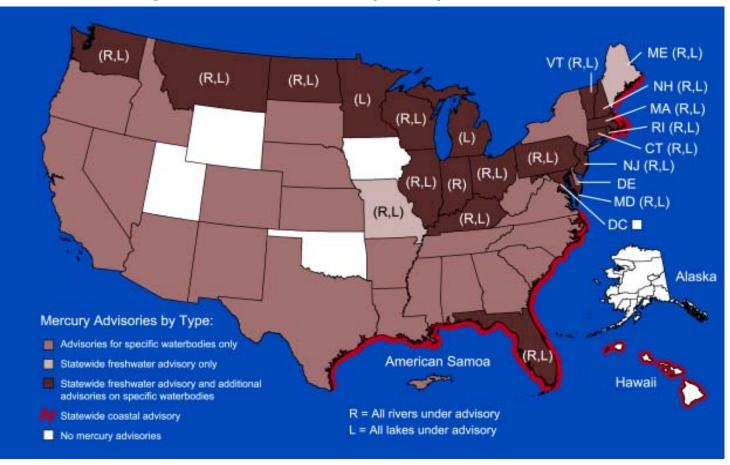
Mercury is a Serious Health Problem

- □ As little as 1/70th of a teaspoon can contaminate all the fish in a 25-acre lake
- Can cause damage to brain and nervous system, neurological disorders, delayed development, learning disabilities
- Especially harmful to children and developing fetuses
- □ 6% 15% of women of childbearing age may be exposed to mercury above "safe" level
- Emerging data show correlation between heart attacks in men and mercury exposure

Mercury is a Pervasive Problem in the U.S.

- □ Coal-fired power plants are largest source of mercury air emissions = 48 tons of mercury per year
- 46 states issued fish consumption advisories for mercury
- Mercury concentrations and deposition levels are similar in the east and west

States with Mercury Fish Consumption Advisories (2002)



NOTE: This map depicts the presence and type of fish advisories issued by the states for mercury as of December 2002. Because only selected waterbodies are monitored, this map does not reflect the full extent of chemical contamination of fish tissues in each state or province.

STAPPA/ALAPCO Participation in Mercury Proceedings

- Monitored EPA studies and actions closely
- □ Transmitted comments to EPA (1994, 1998, 2000)
- Met with EPA in March, 2001
- Actively participated in Utility MACT workgroup
- Developed multi-pollutant principles (May, 2002)
- □ Discussed issues with members on a regular basis

Recommendations to EPA (March, 2001)

- Minimal subcategorization of the industry
- The most stringent levels of mercury control feasible
- □ A multi-pollutant approach
- Enhanced ability for States to implement the standards
- □ Early compliance encouraged through the use of incentives
- No trading of toxics

EPA Regulatory Actions "The Early Days"

- ☐ 1998 Report to Congress
- ☐ December, 2000 Regulatory finding
 - "Necessary and appropriate" to regulate under section 112 of the Act
 - Mercury listed as HAP of greatest concern; others as potential concern
- ☐ Met with various stakeholder groups Spring, 2001
- ☐ Convened the Utility MACT Working Group August, 2001

Utility MACT Working Group

- ☐ Formed for initial period of one year
 - ☐ First meeting August, 2001
 - ☐ Subsequent meetings held nearly every month through October, 2002; met 13 times over 18 months
- ☐ Identified issues and documented stakeholder positions
- ☐ Full documentation of the working group meetings, including all presentations, is available at:

http://www.epa.gov/ttn/atw/combust/utiltox/utoxpg.html

Membership of Utility MACT Working Group

- □ State/Local/Tribal Agencies (6)
- Environmental Organizations (8)
- □ Industry (14)
- Control Equipment Vendors (1)
- □ Coal Interests -- producers and unions (2)
- □ WEST Associates -- western interests (1)

Observations on Utility MACT WG

- Discussions centered entirely on Section 112; regulating mercury under Section 111 was never considered
- Emissions trading was discussed for a brief moment, but quickly discarded for at least two reasons; there was little support and participants recognized Section 112 does not allow trading
- □ EPA abandoned the Working Group without allowing it to finish its work—IPM modeling and variability discussions were scheduled but never held

EPA's Clean Air Mercury Rule

- EPA ignored recommendations of the Utility MACT Work Group (e.g., industry proposal -- MACT approach achieving 26-31 tons)
- EPA recommended regulating mercury under Section 111 of the Act
- Agency revoked its 2000 decision to list utilities under section 112
- EPA adopted a "cap-and-trade" rule with an interim mercury cap of 38 tpy in 2010 (based on co-benefits) and a "final" cap of 15 TPY in 2018
- With banking, actual emissions are predicted at 24 TPY in 2020 and may never reach 15 tpy

EPA's Rule Met With Widespread Opposition

- STAPPA/ALAPCO expressed formal opposition in testimony, comments
- □ ECOS position EPA's approaches are inadequate to protect public health, inconsistent with the Clean Air Act, and do not account for available technology
- Children's Health Protection Advisory Committee proposal does not go far enough to protect children, infants and women of child-bearing age
- Adverse comments from numerous state/local agencies, public interest groups, others

Our Specific Concerns With CAMR

- Not protective of public health and the environment
- □ Too little, too late -- emission limits are not stringent enough; do not represent MACT; and the deadlines are far too protracted
- □ Allows interstate trading hot spots a serious problem
- Ignores HAPs, besides mercury and nickel
- □ Use of Section 111 illegal and inappropriate
 - Will not address residual risk
 - Invites protracted legal battles
 - Will result in SIP-like state-by-state process, not uniform national approach

State/Local Agency Response

State	Program
Connecticut	90% control or 0.6 #/trillion Btu by 2008 (law)
Massachusetts	85% capture or 0.075#/GWh 1/1/2008 and 95% capture or 0.0025 #/GWh by 10/1/2012 (rule)
Wisconsin	40% reduction by 2010; 75% by 2015 (regulation). Goal of 80% reduction by 2018 (regulation).
New Jersey	90% reduction in emissions or 3 mg/MWh by 12/15/2007 (regulation); 5-year extension to 12/15/2012 available if multi-pollutant controls are installed
North Carolina	64% reduction in Hg by 2013; recommendations for additional reductions due in 2005 (statute)
New Hampshire	Cap of 50 lbs/year after federal compliance dates; cap of 24 lbs/year 4 years later (Initial Departmental recommendation to legislature)
Minnesota	Achieved a 70% reduction in emissions from 1990 levels by 2005 (statutory requirement—applies to all sources); 93% reduction goal is proposed.

STAPPA/ALAPCO Response

- States/localities are free to adopt their own mercury control programs provided they meet minimum federal levels
- Members asked the associations to develop a model state/local mercury rule in light of concerns with CAMR
- Appointed a STAPPA/ALAPCO model rule workgroup (NJ, NH, NC, MT, WI, GA, MA, Dayton, OH, NESCAUM) and hired a consultant
- □ Briefed membership October, 2005; strong support
- □ Published November, 2005; model already supported by the Institute of Clean Air Companies and Chair of the National Caucus of Environmental Legislators