Clean Air Mercury Rule Update

Presentation for

Clean Air Markets Division
Office of Air and Radiation
U.S. Environmental Protection Agency
November 16, 2007
Key Elements of Clean Air Mercury Rule (CAMR)

- CAMR establishes “standards of performance” limiting mercury emissions from new and existing coal-fired power plants and creates a market-based cap-and-trade program that will reduce nationwide utility emissions of mercury in two distinct phases
  
  - The first phase cap is 38 tons and emissions will be reduced by taking advantage of “co-benefit” reductions – that is, mercury reductions achieved by reducing sulfur dioxide (SO₂) and nitrogen oxides (NOₓ) emissions under the Clean Air Interstate Rule – the new Base Case. Due to CAMR’s banking provisions, EPA estimates coal-fired units to generate 31 tons of mercury (Hg) in 2010
  
  - In the second phase, due in 2018, coal-fired power plants will be subject to a second cap, which will reduce emissions to 15 tons upon full implementation

- New coal-fired power plants (“new” means construction starting on or after Jan. 30, 2004) will have to meet new source performance standards in addition to being subject to the caps

- CAMR sets an emission reduction requirement for each State and Indian country, by distributing the national emissions cap among the States and Indian country

- Provides an optional cap and trade program based on successful Acid Rain and NOx Budget Trading programs as a method to implement the necessary reductions

- Allows States flexibility on how to achieve the required reductions, including whether to join the trading program
EPA, states, and sources are working together and making significant progress in both the state rulemaking process and installation of monitoring and controls to ensure a smooth transition into the CAMR program. EPA HQ efforts include:

- Training states
- Training sources
- Coordination with 10 EPA Regions
- Reviewing of all draft, proposed, and final state rules

CAMR monitoring begins in 2009; Phase I compliance begins in 2010
How Are States Planning to Meet the CAMR Requirements?

- Major effort on the part of States with a lot of unique “tailoring” of programs
- For the 47 States and 2 tribes that have coal-fired units, an October 2007 EPA Survey indicates:
  - 29 are planning to have trading
    - 19 plan to use CAMR trading “as-is”
    - 7 plan to impose stricter local controls in addition to CAMR trading
    - 2 plan to trade but with only partial allowances
    - 2 plan to convert to non-trading in the future
  - 5 states are not committed to an approach
  - 12 plan a response other than trading, most with more stringent controls, often with control waivers for special circumstances
- 3 States and DC have no coal fired units
CAMR: State Plan Submittal Status

Map represents best available information as of October 2007.

- State Plan trading
- State not trading
- Federal Plan trading
- No clear indication of state’s plans for response
- State specific rules in addition to trading
- Zero budget, evaluating how new sources are treated

* Also has state specific requirements.
CAMR Regulatory Update

- CAMR Federal Plan (FP) – a regulatory backstop
  - Proposed in December 2006
  - Serves as a backstop measure until all states have approved State Plans; approved State Plans will replace FP. FP guarantees on time monitoring and controls across the country
  - EPA is working to finalize the FP by late 2007
  - EPA is considering the proposed option for a state to submit only an allocation methodology instead of a full plan
    - Considering adopting a deadline for submission of state allocation methodologies that would coincide with the effective date of the FP – which is likely to be during March 2008
    - EPA sent a letter to states apprising them of this
• CAMR Federal Plan Notice of Data Availability (NODA)
  – EPA plans to determine FP Hg allocations through a NODA in Fall of 2007
  – Sources, states, stakeholders and public will have opportunity to submit objections to a source’s affected status and/or Hg allocation
  – EPA will finalize the NODA early in 2008
  – EPA is developing a plan to ensure that all allocations are recorded in accounts no later than September 2008. While EPA prefers to use state allocation plans, it may be necessary for EPA to allocate based on the FP in some cases
• CAMR requires affected units (coal-fired units that generate electricity for sale and serve a generator > 25 MW) to continuously monitor and report mercury mass emissions
  – Existing units must install and certify mercury monitoring systems by January 1, 2009
  – New units must install and certify mercury monitoring systems within 90 operating days or 180 calendar days (whichever comes first) after commencement of commercial operation
• Owners/operators of affected units may monitor mercury using a continuous emission monitoring system (CEMS) or a sorbent trap monitoring system
  – Many have already begun ordering monitoring and data acquisition systems and will begin certification testing of their systems in the first quarter of 2008
• Low- emitting units (≤ 29 lbs/yr mercury emitted) may also qualify for a less rigorous monitoring approach, using conservative emission factors derived from emission testing
• Development of the mercury monitoring program has been a collaborative effort between EPA, NIST and industry (EPRI, utility representatives and others)

**EPA will have a strong monitoring capability in place by January 2009, which is CAMR’s “practice year” for mercury data monitoring and reporting**
Ambient Speciated Mercury Monitoring

- EPA is collaborating with the National Atmospheric Deposition Program and the mercury scientific community to establish a new monitoring network
- Monitoring objectives:
  - Build a data set for analyzing spatial and temporal trends
  - Provide data for evaluating models and assessing source-receptor relationships
  - Facilitate the calculation of wet, dry, and total deposition
- Initial "network of opportunity" consisting of existing mercury monitoring and research sites interested in collaborating; anticipate eight to ten sites this year
- Standardizing an ambient mercury monitoring method for the network
- Planning to expand the network over time

Information available at the NADP website:
http://nadp.sws.uiuc.edu/mtn/
## Litigation Status

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(All Dates Are 2007)
For More Information
Visit EPA’s Web Sites

Clean Air Markets
www.epa.gov/airmarkets

Clean Air Mercury Rule
www.epa.gov/mercury